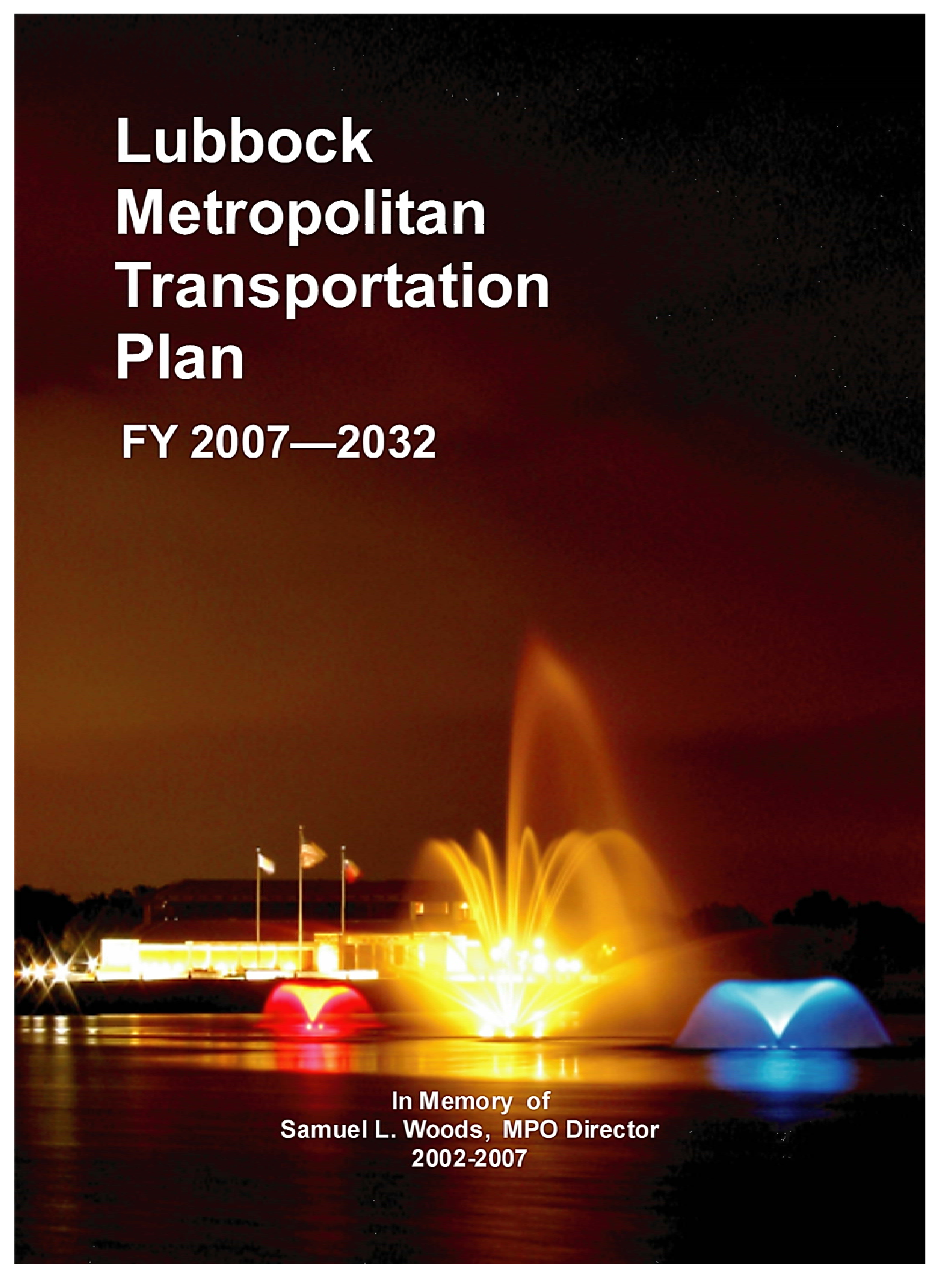


# **Lubbock Metropolitan Transportation Plan**

**FY 2007—2032**



**In Memory of  
Samuel L. Woods, MPO Director  
2002-2007**

# **Lubbock Metropolitan Transportation Plan: 2032**

Approved: September 18, 2007

Prepared by: Lubbock Metropolitan Planning Organization

This Plan was produced with funds made available through the Federal Highway Administration, the Federal Transit Administration, and the Texas Department of Transportation.

All opinions, findings, and conclusions presented in the Plan reflect the views of the Plan authors. The contents do not necessarily reflect the policy views of the Federal Highway Administration, the Federal Transit Administration, or the Texas Department of Transportation.

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**Cover:** City of Lubbock's Huneke Park by Timothy LaPierre with the Freedom Fountain in the foreground and the Lubbock Area Veterans Memorial in the background

## **EXECUTIVE SUMMARY**

**This Metropolitan Transportation Plan was developed based upon the four Lubbock Metropolitan Planning Organization's (MPO) goals of Improve Safety – Congestion Management – Economic Development – System Preservation.**

The long-range Metropolitan Transportation Plan (MTP) of the Lubbock Metropolitan Planning Organization (MPO) is the document - based on the projection of transportation demand and the input of the community - that identifies transportation improvement projects that this community will need over the next 25-year period. The projects then are reviewed and constrained by the projected availability of Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) funds over the next twenty year period. Within that fiscally constrained twenty year period are short-range projects that will in all probability form the foundation for the three-year Transportation Improvement Program (TIP). The TIP represents the plan of projects that will be let for construction in the near term.

### **The Planning Process:**

The MTP was developed in the context of the planning requirements contained in the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). SAFETEA-LU was enacted August 10, 2005, as Public Law 109-59 and authorizes guaranteed funding for highways, highway safety, and public transportation totaling \$286 billion nationwide, SAFETEA-LU represents the largest surface transportation investment in our Nation's history.

SAFETEA-LU specified that the new elements of the planning process must be in place by July 1, 2007 if an MPO is going to seek amendments to an approved MTP or TIP. The practical effect is that the MPO has anticipated needing federal approvals of plans or the TIP shortly after July 1, 2007 and therefore, has adjusted the planning process prior to July 1, 2007 in order to accommodate SAFETEA-LU changes.

The Statewide and Metropolitan Planning Final Rule was published on February 14, 2007, with an effective date of March 16, 2007. It is assumed that FHWA and FTA will issue additional guidance. The MPO has made every reasonable effort to incorporate the planning provisions of SAFETEA-LU into the updated processes to the extent that requirements can be anticipated based on legislative language and guidance.

The MPO has consulted and coordinated with other planning officials to the maximum extent practicable. The MPO has consulted as appropriate with resource agencies and given stakeholders reasonable opportunity to participate. The MPO has made reasonable efforts to obtain information, plans or data from resource agencies including their participation and consultation. The MPO has contacted the identified Native American Tribes for input in the process.

SAFETEA-LU states "The metropolitan transportation plan, shall, at a minimum, include existing and proposed transportation facilities (including major roadways, transit, multimodal and intermodal facilities, pedestrian walkways and bicycle facilities, and intermodal connectors) that should function as an integrated metropolitan transportation system, giving emphasis to those facilities that serve important national and regional transportation functions over the period of the transportation plan." The MPO - MTP gives emphasis to those facilities that serve important national and regional transportation functions over the period of the transportation plan.

## Resources Available:

**Federal Transportation Legislation:** The Safe, Accountable, Flexible, Efficient Transportation Equity Act – A Legacy for Users (SAFETEA-LU) and its predecessors, the Transportation Equity Act for the 21st Century (TEA-21) and the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991, specified the transportation systems on which certain federal funds can be used and defined the role of the Metropolitan Planning Organizations in the planning and development of projects.

This Federal transportation legislation required each designated Metropolitan Planning Organization to develop a Transportation Improvement Program (TIP) and the state to compile a Statewide Transportation Improvement Program (STIP) as a condition of securing federal funds for transportation projects. The projects listed in the STIP, when approved by the Federal Highway Administration and the Federal-Transit Administration, are the only transportation projects that can utilize federal funds. Therefore, the Unified Transportation program (UTP), a ten-year financial plan, and the STIP, a four-year financial plan, are used as the backbone for project development on Texas' intermodal transportation network. The UTP is the TxDOT commission's mechanism to authorize project development.

An important factor in the project development and selection process is the amount of funds available to construct projects. In order for the project development process to maintain its efficiency, projects must be selected years in advance of their actual funding and construction. A project must pass through many development steps including: researching proposed routes; studying environmental impacts; performing engineering surveys; holding public hearings; signing agreements with the counties or cities (if needed to fulfill state or federal requirements); acquiring right-of-way; producing construction plans; and awarding construction contracts.

The actions listed above, and many others, must occur in sequence to bring a project from an idea to a reality. Therefore, a project must be programmed years in advance of the actual construction to ensure that all development steps are completed at the appropriate time.

## Funding:

The Texas Department of Transportation (TxDOT) Unified Transportation Program (UTP) has established funding categories to reflect various programs outlined in SAFETEA-LU and selected State funds.

Given that the MPO, in consultation with TxDOT and interested parties, select projects for Category 2 and 7 funding a projection of funding in this area is of community wide concern. Category 2 provides for funding mobility and added capacity projects on major state highway system corridors which serve the mobility needs of a Transportation Management Area (TMA). Category 7 provides for funding mobility projects within the Transportation Management Areas (TMA). The projection of available funding for the planning period follows:

Metropolitan Transportation Plan – Financial Constraint Summary			
	State/Federal	Local	Total
Construction	\$319,550,000	\$238,168,000	\$557,718,000
Operations/Maintenance	\$46,032,525	\$52,713,750	\$98,746,275
Transit	\$55,207,564	\$101,432,529	\$156,640,093



Metropolitan Transportation Plan – Financial Constraint by Category				
Category	Description	Funding Source	Average	25-year Projected Available
2	Metropolitan Area	Federal State	\$3,360,000	\$84,000,000
7	Metropolitan Mobility	Federal State	\$4,422,000	\$110,550,000
11	District Discretionary	Federal State	\$5,000,000	\$125,000,000
	Operations and Maintenance	Federal State	\$1,814,301	\$46,032,525
Local	City of Lubbock and Lubbock County <sup>1</sup>	Local Funds	\$10,120,000	\$253,000,000
Local Operations	City of Lubbock	Local Funds	\$2,108,550	\$52,713,750
Transit	Section 5303, 5310, 5311 only	FTA & State	\$9,696,000	\$242,400,000
<sup>1</sup> Includes City of Lubbock's Gateway Streets Funds (\$58,795,500) and Pass Through Financing (\$76,248,000)				

### Short Range and Priority Projects:

The Lubbock MPO revises the short range transportation improvement program every two year period. The development of the Texas Metropolitan Mobility Plan identified the transportation needs of the study area regardless of funding availability. This highlights the funding gap that exists between projected funding available during the MTP period even with new tools provided by the Texas legislature and the work that needs to be done to eliminate Level of Service "F". This gap of over \$540 million represents work that will not get done due to the unavailability of funds.

### Federal Funding Programs for Transit:

SAFETEA-LU provides the authorization for the Federal Transit Administration (FTA) programs. The basic structure of the Federal transit programs remains essentially the same but several new programs and activities have been added and new features have been incorporated. The funding flexibility features and similar matching ratios to the highway programs have been retained. The definition of a capital project has been revised to include preventive maintenance, the provision of non-fixed route paratransit service, the leasing of equipment or facilities, safety equipment and facilities, facilities that incorporate community services such as daycare and healthcare, and transit enhancements.

### **SAFETEA-LU Compliance:**

The plan was developed with consideration of the guidelines developed for key SAFETEA-LU provisions. They include:

- Section 6001 – Transportation Planning
- Metropolitan Plan Cycles
- TIP/STIP Cycles and Scope
- Metropolitan and Statewide Plans – Environment Mitigation
- New Consultations
- Consistency of Transportation Plan with Planned Growth and Development Plans
- Transportation System Security
- Operational and Management Strategies
- Participation Plan
- Visualization Techniques in Plans and Metropolitan TIP Development
- Publication of Plans and TIP/STIP
- Annual Listing of Obligated Projects
- Congestion Management Processes in Transportation Management Areas (TMAs)
- TMA Certification Cycle
- Coordinated Public Transit-Human Services Transportation Plan (Sections 3012, 3018, and 3019)

### **Recommendations:**

Federally funded highway projects recommended in the urbanized area are a product of the planning process. The process included:

- Output of the Congestion Management Process,
- Consultation and coordination with other planning officials and appropriate resource agencies and stakeholders,
- And Public Review and Input.

The final goals, policies, and direction of the metropolitan planning area with regard to current and forecasted transportation and land-use conditions and trends are delineated in Chapter 5 – Streets and Highways; Chapter 6 – Public Transportation; Chapter 7 – Bicycle and Pedestrian Plan; Chapter 8 – Lubbock International Airport and Chapter 9 – Railroads and Trucking.

Federally funded transit projects were developed in consultation with Regional Transportation Authority and as a product of the *Regional Service Plan for the South Plains Region*. These recommendations included specific reference to the FTA funding for Section 5316 and 5317 funding.

The MPO has made reasonable efforts to obtain information, plans or data from resource agencies including their participation and consultation however recognizes that the planning process is dynamic. Efforts are currently underway to update the MPO planning process including a review of the demographic database, re-evaluation of 461 Traffic Analysis Zones, updating of the network definitions, TxDOT saturation counts conducted and TxDOT travel surveys.

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*Lubbock Metropolitan Transportation Plan Fiscal Year 2007-2032*

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## Chapter 1 – Introduction and Background

### Goal

In the initial Metropolitan Transportation Plan, developed in 1994, a goal was established which still holds true today.

*Create an integrated, multi-modal transportation network to better serve the citizens in the Lubbock Metropolitan Area.*

### Introduction

Transportation facilitates the movement of people and/or goods from one place to another. Today's transportation-intensive environment demands transportation facilities are kept safe and functional. Because transportation is a cornerstone of economic stability and growth, it is vital that transportation issues and needs are addressed to ensure the economic environment remains accessible and efficient. Supporting the transportation environment includes supporting not only roadways used by automobiles and mass transit, but airline, railway, pipeline, bicycle, and pedestrian facilities as well.

*The Lubbock Metropolitan Transportation Plan: (LMTP: 2032) is a planning tool designed to outline the transportation needs for the Lubbock Metropolitan Area over the next twenty-five (25) years.*



President George W. Bush and Rep. Dennis Hastert hold up the signed SAFETEA-LU document at the Caterpillar-Aurora Facility in Montgomery, AL on August 10, 2005.

The means for achieving this goal is through the use of short and long-term projects. The LMTP is designed to anticipate future conditions and meet current area transportation needs. This is the fourth edition of the LMTP designed by the Lubbock Metropolitan Planning Organization (LMPO). In August of 2005 President George W. Bush signed the Safe Accountable Flexible Efficient Transportation Equity Act—A Legacy for Users (SAFETEA-LU). SAFETEA-LU builds on the foundations of ISTEA and TEA-21 supplying funds and refining programmatic framework for investments needed to maintain and grow vital transportation infrastructure. SAFETEA-LU addresses challenges such as improving safety, reducing traffic congestion, improving efficiency in freight movement, increasing intermodal connectivity, and protecting the environment. Metropolitan Planning Organizations are to become compliant with additional requirements prior to July 1, 2007. This MTP will address the requirements to ensure compliance prior to the deadline. Attaining the necessary objectives of consistency, compliance, and coordination of efforts with all groups involved in making these ideas a reality is crucial to making the

LMTP a success.

The LMTP: 2032 was prepared with the assistance and cooperation of many public entities and private citizens, and the success in preparing the Plan and achieving its implementation is due in large measure to their efforts.

### Background

With the Federal Aid Highway Act of 1962, Congress passed legislation making urban transportation planning a condition for receipt of federal highway funds in urban areas. This legislation encouraged “a **Continuing, Comprehensive** transportation planning process carried on **Cooperatively** by the states and local communities”; thus, the “**3-C**” planning process evolved.

An array of subsequent highway bills further increased the need for the transportation planning process. These bills were:

- Federal Aid Highway Act of 1970
- FHWA/UMTA Joint Regulations (1975)
- Federal Aid Highway Act of 1982
- Revised FHWA/UMTA Joint Regulations (1983)
- Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA)
- Transportation Equity Act for the 21st Century of 1998 (TEA-21)
- Safe, Accountable, Flexible, and Efficient Transportation Equity Act of 2005 (SAFETEA-LU)

As a result, in 1969 the City of Lubbock and Lubbock County entered into a “continuing Phase Agreement” with the Texas Department of Transportation (TxDOT). The Lubbock Urban Transportation Study (LUTS) was established. In 1975 LUTS was designated by the Governor to be the Metropolitan Planning Organization (MPO) for the Lubbock area. The MPO is responsible for the “3-C” planning process, operating basic planning activities of the Study.

Transportation planning is a process of projecting future transportation needs, investigating and evaluating alternative actions for meeting those needs, assessing the financial ability of the community to implement those actions, and recommending reasonable strategies based on needs and available resources. Elected officials and others in decision-making roles need access to this information to help them develop policies, programs, and projects.

The transportation planning process is continuous. Conditions affecting the transportation system, such as population growth, land use patterns, employment changes, traffic volumes, etc. are monitored. Alternate means for alleviating congestion are identified, and decisions are made on which projects are to be carried out. The proposed projects are evaluated in relation to expected funding levels, prioritized, and listed in order of importance to the community. All transportation modes for the entire metropolitan area are studied and addressed in a comprehensive manner. The transportation planning process is structured to include cooperative input and direction from participating cities, counties, agencies, and the public. This results in the development of a plan which encompasses the 3-C planning process.

The transportation plan must be comprehensive, and all elements of transportation throughout the study area are considered in preparing the Plan. The Plan must be developed through cooperative participation between local, state, and federal governments. The Plan must also be continuing process. The initial, adopted Plan must be continuous through on-going review of transportation projects and continual monitoring of basic elements of the Plan.

These provisions were, and still are, intended to:

- Prevent the development of conflicting plans by different governmental entities,
- Prevent duplication of effort by providing a single focus of regional transportation,
- Planning within the designated Metropolitan Planning Organization Area Boundary, and
- Provide an organized system to establish priorities for project funding.

## **MPO Structure**



Transportation Policy Committee

The Lubbock Metropolitan Planning Organization is made up of a Transportation Policy Committee (TPC), a Transportation Advisory Committee (TAC), and MPO staff. Bylaws adopted in February 2004 outline TPC and TAC structure. The Transportation Policy Committee (TPC) structure is outlined in the 1973 Designation Agreement and its roles reiterated in the 1988 Designation Agreement, Under I. Organization, Section C., which declares, “Use the Committee

structure established pursuant to Section 134 of Chapter 1 of Title 23 U.S. C. as the group responsible for giving the Metropolitan Planning Organization overall transportation policy guidance.”

The Metropolitan Planning Contract sheds more light on this issue when it stated the TPC’s primacy in “Whereas, the Governor of the State of Texas has designated the City of Lubbock, acting through its Transportation Policy Board to be the MPO for the above-mentioned urbanized area(s).”

**The fiscal agent of the Lubbock Metropolitan Planning organization is responsible for maintaining required accounting records for state and federal funds consistent with current state and federal requirements, providing funding to allow the MPO staff to operate the program and establishing fiscal and personnel management agreements with the MPO Policy Committee to identify respective relationships, roles and responsibilities.**

The City of Lubbock serves as the fiscal agent for the Lubbock Metropolitan Planning Organization. The Transportation Advisory Committee now serves in a technical capacity.

### **Transportation Policy Committee Structure**

#### **Voting Members:**

1. One Elected County Official, Lubbock County, appointed by the County Commissioner’s Court;
2. County Judge, Lubbock County;
3. Three Representatives of the City of Lubbock (including at least two Elected Officials), appointed by the Lubbock City Council;
4. District Engineer, Texas Department of Transportation – Lubbock District;
5. City Manager, City of Lubbock
6. Mayor, City of Wolfforth; and
7. General Manager, Citibus

#### **Non-Voting Members**

1. One Representative from the Federal Highway Administration;
2. One Representative from the Federal Transit Administration;
3. One Representative from the Texas Department of Transportation’s Transportation Planning and Programming Division;
4. One Representative of the Texas Commission on Environmental Quality (TCEQ); and
5. Any State legislators, or United States Congressmen, whose districts include the study area and who desire to serve in an ex-officio capacity.

### **Transportation Advisory Committee Structure**

#### **Voting Members:**

1. Director of Planning, City of Lubbock;
2. City Engineer, City of Lubbock;
3. City Traffic Engineer, City of Lubbock;
4. Two Lubbock County Commissioners (must be designated by Commissioner’s Court);
5. One designated Representative, Citibus;
6. Director of Transportation Planning and Development, TxDOT Lubbock District;
7. City Manager, City of Wolfforth;
8. Director of Public Works, Lubbock County;
9. One designated Representative from the City of Lubbock Police Department;
10. One designated Representative from the Texas Department of Public Safety.



11. One designated Representative from Texas Tech University; and
12. Director of Public Works, City of Lubbock

**Non-Voting Members:**

1. One Representative of the TP&P Division, TxDOT, Austin;
2. One Representative of the Federal Highway Administration;
3. One Representative of the Commission on Environmental Quality (TCEQ);
4. One Representative of the South Plains Association of Governments;
5. One Representative of the Lubbock County Sheriff's Department;
6. One Representative of the Freight Community;
7. One Representative of the Airport Authority; and
8. Two Representatives from the City of Lubbock's Traffic Commission

**Lubbock Metropolitan Planning Organization Staff**

Samuel L. Woods, AICP, Transportation Planning Director  
Darrell J. Westmoreland, AICP, Transportation Planner  
Tera Davis, Transportation Planning Technician

**Previous Long-Range Transportation Planning Activities**

Long-range transportation planning began with the enactment of the Federal Aid Highway Act of 1962. The transportation plans developed and adopted have been used through the years to best determine the future transportation infrastructure. Following is a list of these plans previously used for transportation planning in the Lubbock area:

Lubbock Urban Transportation Plan, Volumes 1 and 2 (1964)  
Level II Review of the Lubbock Urban Transportation Plan, Volume 2 (1964—1985), Volume 3 (1970—1990), Volume 4 (1980—2005)  
Master Plan for West Tex Air Terminal, Lubbock (1969)  
Master Plan Review, Lubbock Regional Airport (1971)  
Master Plan Review, Lubbock International airport (1981)  
Airport Master Plan for the Lubbock International Airport (1992)  
Transit for Lubbock's Future (1972)  
Citibus—Comprehensive System Analysis, Volumes 1 and 2 (1990)  
Citibus—Fixed Route Transit Service, Comprehensive Operational Analysis (1993)  
Lubbock Metropolitan Transportation Plan: 2015 (1994)  
Goals for Lubbock—A Vision Into the 21st Century (1995)  
Lubbock Metropolitan Area Comprehensive Bicycle Plan (1995)  
Lubbock Capital Improvements Program (5 Year Cycle)  
Thoroughfare Plan (1998)  
Lubbock Metropolitan Transportation Plan: 2025 (1999)  
Lubbock Metropolitan Transportation Plan: 2030 (2004)  
City of Lubbock Thoroughfare Plan 2007

The Lubbock Metropolitan Transportation Plan (LMTP) development process involves data collection and analysis, socioeconomic data projection, special studies and citizen input. The LMTP serves as framework for project development and guides public entities in selecting projects from the Plan for implementation through the State's Transportation Improvement Program (STIP), the City of Lubbock's Capital Improvement Program (CIP), and other transportation programs. Comprehensive transportation planning has, and will continue to be, an ongoing effort of the local governments encompassed in the

Lubbock metropolitan area.

## **Geographic Information**

Lubbock is located in the panhandle of Texas in the center of county area referred to as the “South Plains”. The predominant climate is semi-arid with extremes of temperature over 100 degrees in summer and to below freezing in winter. The primary economic industry of the area agriculture, specifically cotton. Other industries include: ranching, oil production, health care, education, and limited manufacturing. The Lubbock area serves as a central transportation conduit for the region.



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## **Urbanized Area Boundary**

The U.S. Bureau of the Census defines the Urbanized Area as a place with a minimum of 50,000 persons. Areas outside the city limits can be included in the urbanized area if the population density consists of 1,000 persons per square mile and is connected to the city by a road not more than 1 1/2 miles long. In 2003 the MPO approved an Adjusted Urbanized Area Boundary. In 2004 the boundary was adjusted to include new urbanized areas as defined by the 2000 census. Compared to the last urbanized area boundary, it adds the Reese Technology Center area, the City of Wolfforth, and due to annexation and expansion of Lubbock's city limits, and current high levels of development in the south Lubbock area to 114th Street. Areas removed are rural areas and the city landfill site. In several areas the city limits of Lubbock are used, for simplicity's sake. See Map 1-1.

## **Metropolitan Area Boundary**

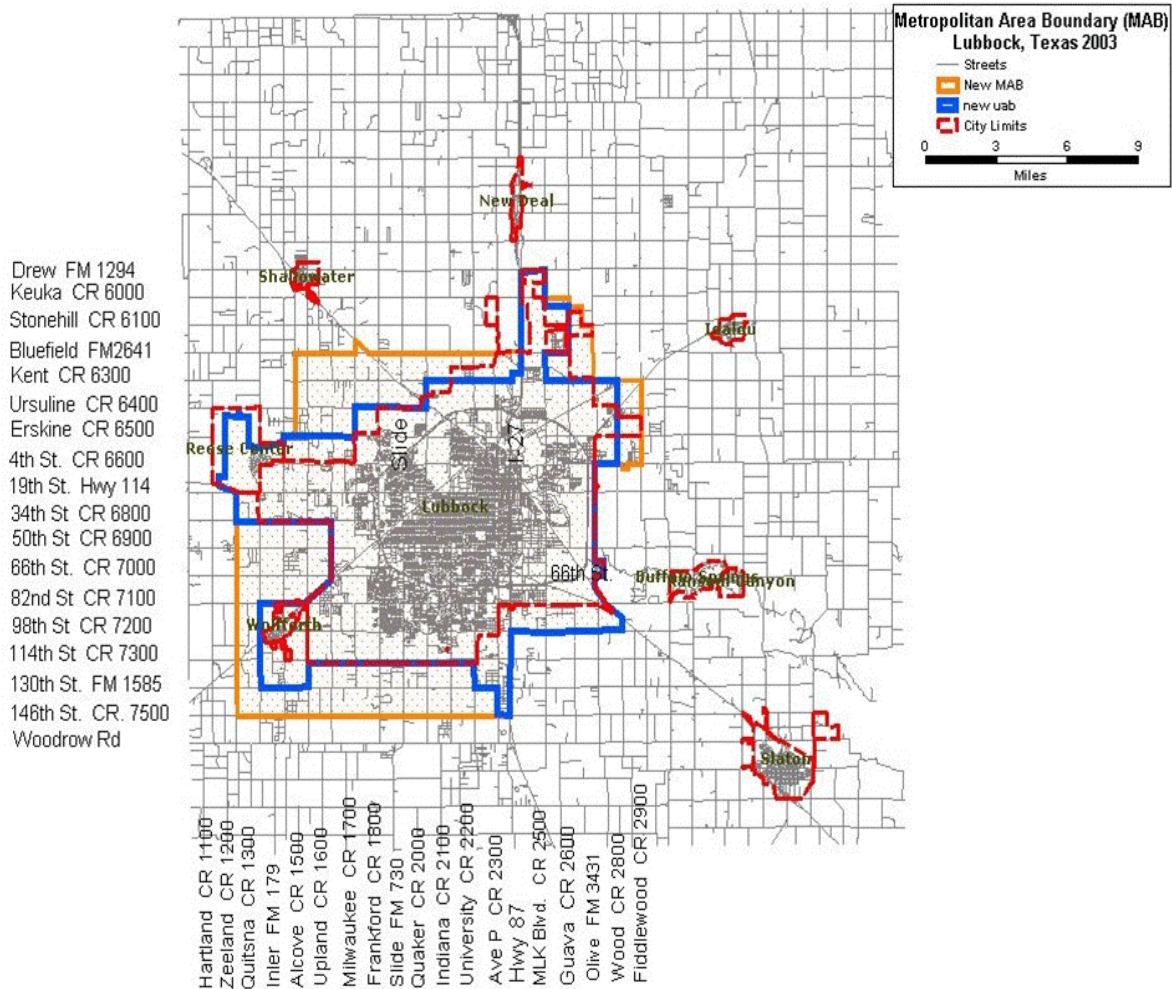
The Metropolitan Planning Boundary includes the Adjusted Urbanized area plus the area projected to be developed within the next 20 years. The Metropolitan Area Boundary encompasses more than 190 square miles and includes the incorporated cities of Lubbock and Wolfforth. The remaining area is rural with spotted development. See Map 1-2.

The Metropolitan Area Boundary was adjusted to include new urbanized areas and to remove some rural areas and the City of Lubbock landfill. Where the boundary follows a roadway, the boundary also includes all right-of-way of that roadway.

The Lubbock Metropolitan Planning Organization's Transportation Policy Committee approved the Metropolitan Area Boundary on September 11, 2003. The LMPO received approval from the Governor of the State of Texas on November 14, 2003.

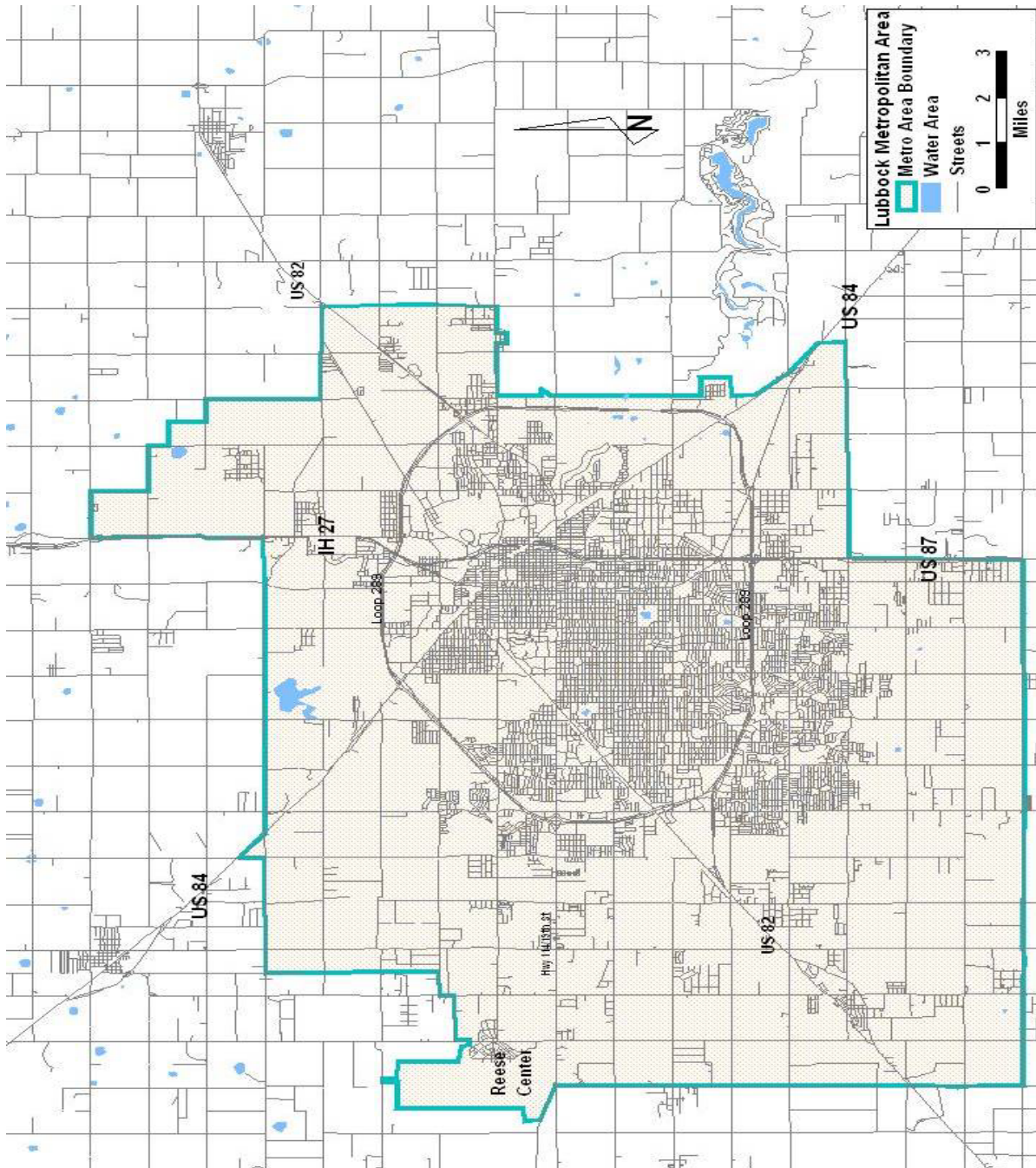
## **Introduction and Background Maps**

Map 1-1: Lubbock Metropolitan Urbanized Area Boundary





Map 1-2: Lubbock Metropolitan Area Boundary



Source: Lubbock Metropolitan Planning Organization

## Chapter 2 – Public Participation Plan

### Introduction:

Effective transportation planning must be responsive to the needs of the community and therefore effective public input is essential. The SAFETEA-LU requires the MPO to provide citizens, affected public agencies, representatives of public transportation employees, freight shippers, providers of freight transportation services, private providers of transportation, representatives of users of public transportation, representatives of users of pedestrian walkways and bicycle transportation facilities, representatives of the disabled community, and other interested parties with a reasonable opportunity to comment on the long-range transportation plan, the Transportation Improvement Program (TIP) and major revisions. SAFETEA-LU also requires the MPO to consult, as appropriate, with State and local agencies responsible for land use management, natural resources, environmental protection, conservation, and historic preservation concerning the development of a long-range transportation plan and TIP. Further, the MPO correspondence to tribal leaders indicated that the planning document is not in any way to be associated with Section 106 tribal coordination requirements under NEPA. The MPO maintains a website [www.lubbockmpo.org](http://www.lubbockmpo.org) that includes this Metropolitan Transportation Plan, the Transportation Improvement Program (TIP), and other documents that the MPO produces.

### Current Policy:

The Transportation Policy Committee adopted a SAFETEA-LU - compliant Public Participation Plan on August 1, 2006, which encourages early and continuous public participation in the planning process. The Public Participation Plan can be found at: <http://mpo.ci.lubbock.tx.us/document/Adopted%20PP.pdf>. Communication is encouraged through the publication of public notices, agendas, news releases, and a regularly published newsletter. The MPO staff also seeks invitations from civic, social, educational, and business organizations to talk to them about the MPO planning process. The MPO has prepared printed literature to educate citizens, elected officials, and appointed officials. Materials available includes: MPO studies, the MPO Handbook, the MPO Primer, a newsletter, and specific project brochures.

As part of our public participation and interagency consultation efforts, the draft MTP was made available for review and comment to federal, state, and local resource agencies, land use management agencies, bicycle and pedestrian representatives, disabled representatives, natural resources, environmental protection, conservation, historic preservation agencies regarding the development of the long-range transportation plan and 113 Individuals. The members of the Technical Advisory Committee and the Transportation Policy Committee also reviewed the draft and public notices were released about the draft being placed on the MPO web page, in local libraries and at the offices of the member agencies.

The MPO meets the requirements of the "adequate public notice of public involvement," by placing notices in the *Lubbock Avalanche-Journal*, *Golden Gazette*, *West Texas Hispanic News*, and *Southwest Digest*; the latter three are efforts to reach the elderly, Hispanic, and African-American populations within our boundary.

### Title VI and Environmental Justice:

A 1994 Presidential Executive Order directed every federally funded agency to make environmental justice part of its mission by identifying and addressing the effects of all programs, policies, and activities on "minority populations and low-income populations." The MPO's environmental justice initiatives accomplish this goal by involving the potentially effected public in developing transportation projects that fit harmoniously within the community without sacrificing safety or mobility.

There are three fundamental environmental justice principles:

- To avoid, minimize, or mitigate disproportionately high and adverse human health and environmental effects, including social and economic effects, on minority populations and low-income populations.
- To ensure the full and fair participation by all potentially affected communities in the transportation decision-making process.
- To prevent the denial of, reduction in, or significant delay in the receipt of benefits by minority and low-income populations.

The MPO serves as the primary forum where TxDOT, local agencies, and the public develop local transportation plans and programs that address the metropolitan area's needs. The MPO helps local public officials understand how Title VI and environmental justice requirements improve planning and decision making. The MPO therefore has:

- Enhanced our analytical capability to ensure that the long-range transportation plan and the transportation improvement program (TIP) comply with Title VI.
- Identified residential, employment, and transportation patterns of low-income and minority populations so that their needs can be identified and addressed, and that the benefits and burdens of transportation investments are fairly distributed.
- Evaluated and improved the public participation process to eliminate participation barriers and engage minority and low-income populations in transportation decision making.

The MPO uses Geographic Information System Tools, which may include GIS-ST, NEPAAssist (when available), and other software (GISST) developed by the Environmental Protection Agency Region 6 and other agencies, as necessary, to evaluate environmental mitigation activities within the 25-year MPO planning boundary. It is also reviewing Title VI policies in the MPO's transportation planning process. Maps 2.1 and 2.2 shows the areas of Minority, Low Income, and Hispanic population. All maps contain minority, low-income, and Hispanic population layers for Title VI analyses. Public transit is only available to some parts of the City of Lubbock and excludes the City of Wolfforth and portions of Lubbock County within the Lubbock Metropolitan Area Boundary.

### **Public comments:**

Appendix I contains comments (if any) received during the public comment periods and public forums or hearings. Additionally copies of the notices of those public forums and hearing are included.

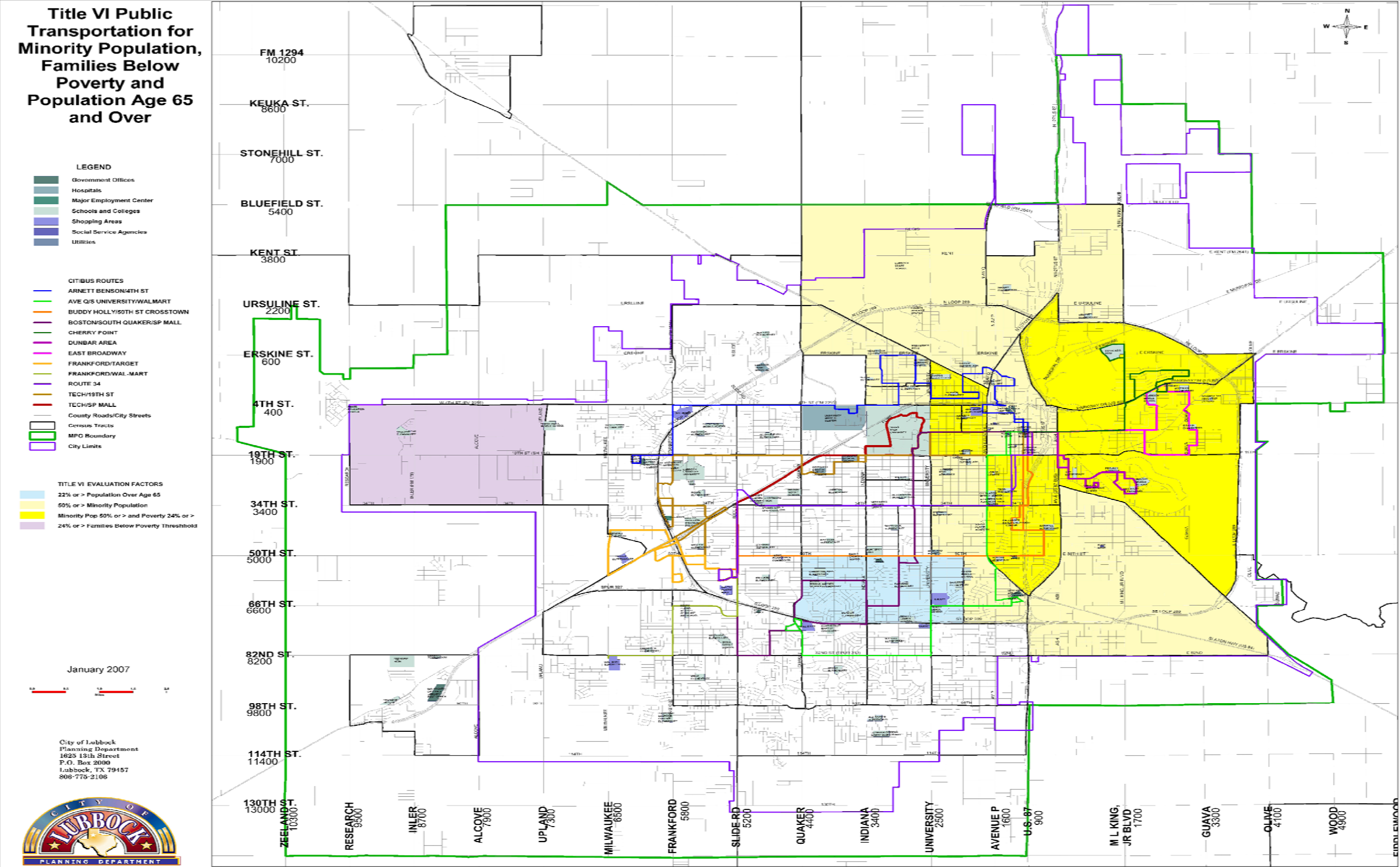
**Lubbock Metropolitan Planning Organization's Notification / Participation List**

City of Amarillo	City of Levelland	City of Lubbock
City of Plainview	City of Wolfforth	Texas Transportation commission
Congressman Randy Neugebauer	Texas Department of Public Safety	The Federal Highway Administration
The Federal Transit Administration	Governor of Texas	Senator Kay Bailey Hutchinson
Lubbock County	Lubbock Independent School District	City of Lubbock Police Department
Abilene Metropolitan Planning Organization	Amarillo Metropolitan Planning Organization	El Paso Metropolitan Planning Organization
Midland/Odessa Metropolitan Planning Org.	Tyler Metropolitan Planning Organization	Texas Wildlife Division
Senator John Cornyn	South Plains Association of Governments	Texas Department of Transportation
Texas Transportation Institute	African American Chamber of Commerce	Amarillo Chamber of Commerce
Lubbock Chamber of Commerce	Lubbock Hispanic Chamber of Commerce	Odessa Chamber of Commerce
Slaton Chamber of Commerce	Capital Area Metropolitan Planning Org.	Lubbock Preston Smith International Airport
Lubbock Civic Center	Caprock AMBUCS	League of Women Voters
Lubbock Lions Club	Lubbock Rotary Club	Division for the Blind Service
Just Transportation	Texas State Commission for the Blind	Texas Department of Agriculture
Texas Commission of Environmental Quality	Ports to Plains	Amarillo Economic Development
Lubbock Economic Development	Reese Technology Center	Seminole Economic Development
Hodges Community Center	Maggie Trejo Super Center	Maxey Community Center
Rawlings Community Center	Simmons Community Center	Godeke Library
Groves Library	Mahon Library	Patterson Library
City of Wolfforth Library	Arnett Benson Neighborhood Association	Bayless-Atkins Neighborhood Association
Bowie Neighborhood Association	Caprock Neighborhood Association	Carlisle Neighborhood Association
Chatman Hill Neighborhood Association	Coronado Neighborhood Association	Dunbar/Manhattan Heights N.A.
Guadalupe Neighborhood Association	Harwell Neighborhood Association	Heart of Lubbock Neighborhood Association
K.N. Clapp Neighborhood Association	Kings Park Neighborhood Association	Lubbock United Neighborhood Association
Maedgen Area Neighborhood Association	Maxey Neighborhood Association	North By Northwest Neighborhood Assoc.
Northridge Neighborhood Association	Overton South Neighborhood Association	Parkway-Cherry Point Neighborhood Assoc.
Preston Smith Neighborhood Association	Regal Park and Day Estates N.A.	Remington Park Neighborhood Association
Shadow Hills Neighborhood Association	Skyview Neighborhood Association	Slaton/Bean Neighborhood Association
South Lubbock Neighborhood Association	Southgate Neighborhood Association	Stubbs-Stewart Neighborhood Association
Tech Terrace Neighborhood Association	Waters Neighborhood Association	West End Neighborhood Association
Westchester Neighborhood Association	Wheelock & Monterey Neighborhood Assoc.	Windmill Neighborhood Association
A&S Transportation, Inc.	Citibus	Burlington Northern Santa Fe Railway
Community Rail Development Corp.	LaEntrada al Pacifico Rail District	Permian Basin Railways
MOTRAN Rural Transit	Texas Bicycle Coalition	Safe Routes to School
Frenship Independent School District	Lubbock Independent School District	Lubbock Senior Center
Maggie Trejo Super Center	Rawlings Senior Center	Simmons Senior Center
Commodity Export Corporation	Apache Tribe of Oklahoma	BIA-Anadarko Tribal Nation
Comanche Nation of Oklahoma	Jicarilla Apache Nation	Kiowa Indian Tribe of Oklahoma
Mescalero Apache Tribe	Wichita and Affiliated Tribes	Texas Tech University
Excel Energy	Louis Dreyfus	Permian Basin Regional Planning Comm.
Plains Cotton Cooperative Association	Supply Chain Management, Inc.	Z-Bar Cattle Company
Parkhill, Smith & Cooper	Hartline, Dacus, Barger, Dreyer, & Kern	LaFont Law Firm
Margaret Ingle, Attorney	ABC Bank	City Bank
Permian Stone	Amigo Publications – El Editor	El Sol Latino
Golden Gazette	Lubbock Avalanche-Journal	Southwest Digest Magazine
The Hispano Weekly	West Texas Hispanic News	Fox Talk 950 KJTV-AM
K DAV 1590 AM	DAIQ-FM SuperEstrella	KAMY
Mallory Alexander Logistics	KAMZ 103.5 LaLey	KBTE-FM Beat 104.9
KEJS FM	KFMX 94.5 FM	KFYO 790 AM
KJAK FM Radio	KKAM 1340 AM	KLLL FM
KMMX Mix 100.3	KOHM 89.1 FM	KONE Classic Rock 101.1
KRBL 105.7 FM	KRFE AM 580	KTXT FM
KYFT (BBN) 90.9 FM	Magic 93.7 KXTQ-FM	Stars 104.3 KLZK
Z 102 FM	Fox 34 KJTV	KAMC TV/ABC 28
KBZO-TV Univision 51	KCBD-TV NewsChannel 11	KGL Channel 30
KLBK TV/CBS 13	KTXT-TV (Texas Tech University)	UPN Lubbock KUPT 14
Donna DuBose Realtors	Ernesteen Kelly Realtors	Rose Real Estate
Westmark Realtors	Texas Historical Commission	Dept. of Housing and Urban Development
U.S. Department of the Interior	Environmental Protection Agency Region 6	Natural Resources Conservation Service
Natural Resources Service Center	U.S. Fish and Wildlife Service Arlington	Texas Commission on Environmental Quality
Texas Parks and Wildlife Department	State Single Point of Contact Governor's Office	FHWA Division Administrator
TX Parks & Wildlife Resource Protection	USDA National Resources Conservation	USDA Washington DC
US Fish and Wildlife Service Austin	US Army Corps Tulsa District	US Army Corps Regulatory Branch
Texas Motor Transportation Association	Supply Chain Management, Inc.	West Texas Peterbilt (Lubbock), Inc.

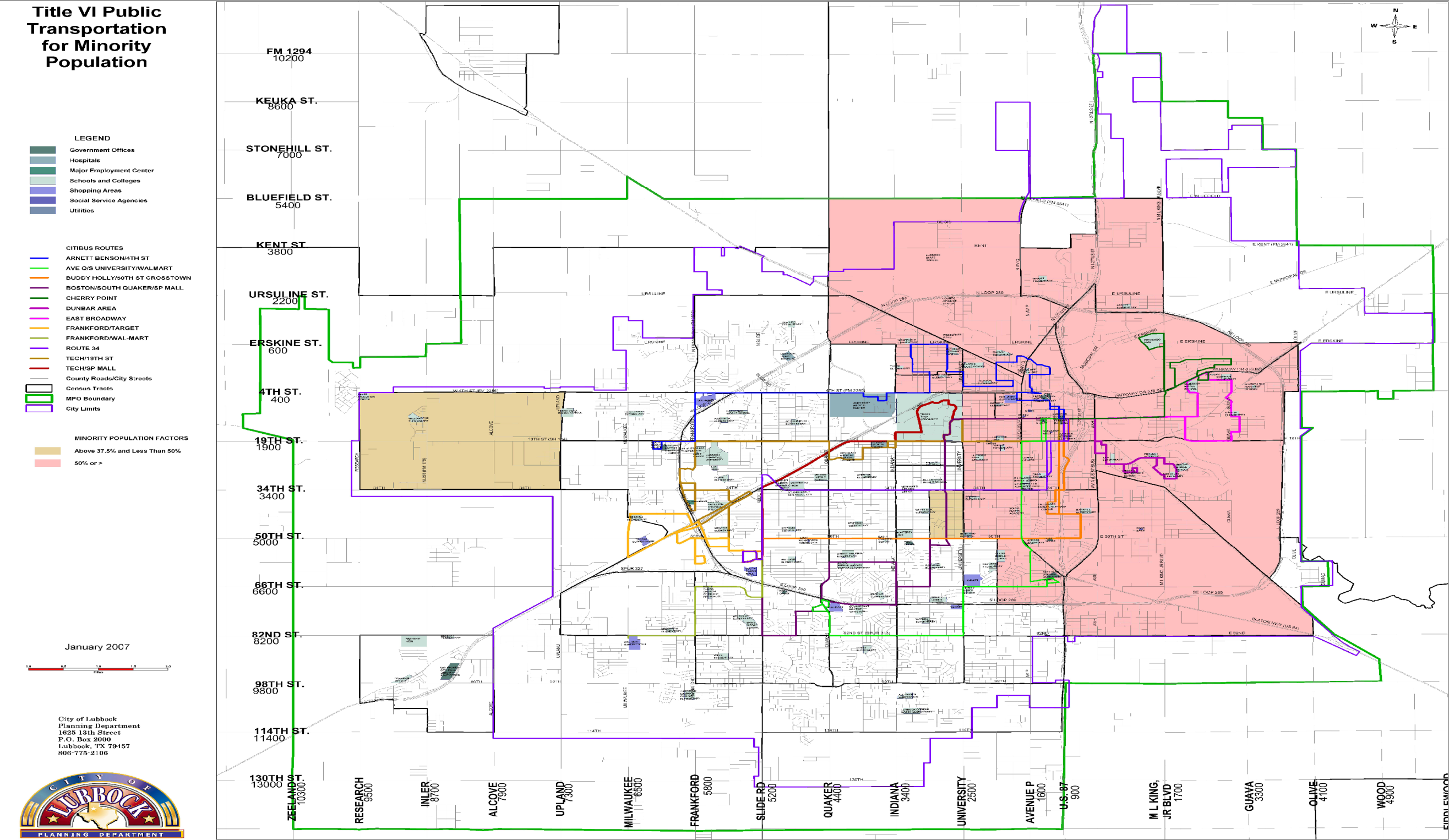


**Public Participation Plan Maps**

Map 2-1 – Title VI Public Transportation for Minority Population, Families Below Poverty and Population Age 65 and Over.



Map 2-2 – Title VI Public Transportation for Minority Population



## **Chapter 3 – Regional Trends and Demographics**

### **Demographic Data**



Accurate demographic data along with reasonable projections are an essential tool for good transportation planning. Demographic data is used to project land use patterns and transportation needs. Changes in demographics have an impact on travel behavior and patterns. This makes it possible to prepare travel forecasts and demands on the transportation system. The base year for this MTP is 2000.

The City of Lubbock Planning Department maintains demographic and land use data for the Lubbock Metropolitan Planning Organization. Demographic information includes: population, households, income, employment, land use, and special traffic generators. Data is provided for the base year (2000) and the projected forecast year (2030). Sources for determining the existing characteristics include Census Bureau reports, the Texas Employment Commission data, and the City of Lubbock Land Use Data File. The demographic data and street network system are combined by the Texas Department of Transportation to produce a computer model that predicts traffic flows and can be used to evaluate the impact of changes to the street network.

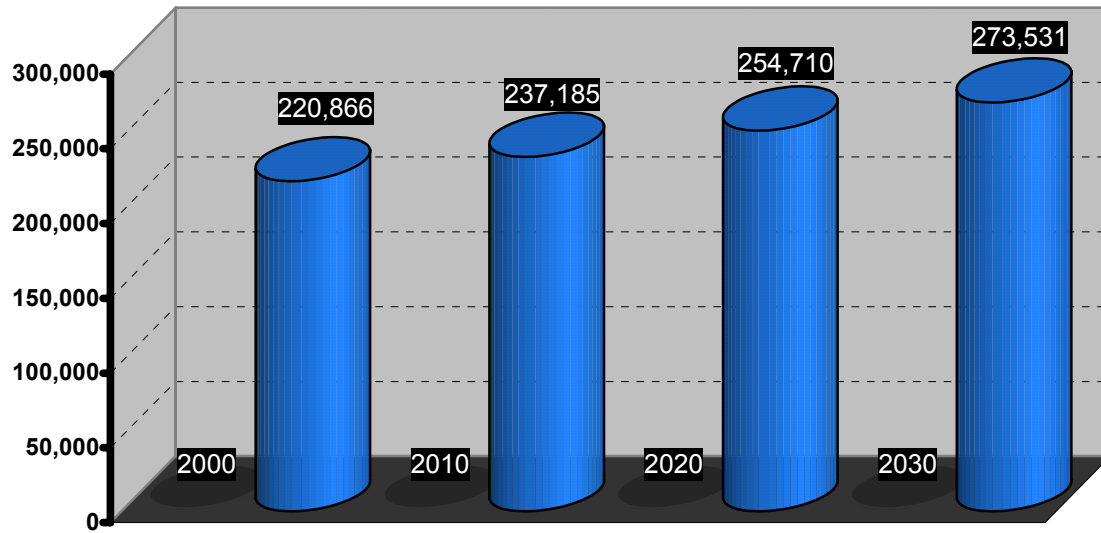
The Lubbock Metropolitan Planning Area is subdivided into 453 geographic areas, with a total land area of 318.5 square miles, known as Traffic Analysis Zones (TAZ). These zones are classified as: Central Business District, Central Business District Fringe, Urban, Suburban, and Rural. The U.S. Census, Thoroughfare Plan, and population density determine the traffic analysis zones. Traffic zone boundaries follow the census block boundaries whenever possible. The combined data is reported by the Texas Department of Transportation in the Lubbock 2000 Base Year Regional Travel Demand Report, which includes current traffic counts that validate the reported information.

Projections are based upon historic trends modified by local knowledge of development trends along with consideration of projections made by the Texas State Data Center. The five-year cycle provides for adequate revisions as the various trends change. The City of Lubbock produces only one population for its projections rather than high, medium, or low projections. It is felt the range between the high and the low projections is too great for practical application by the Lubbock MPO and other organizations using these projections. The projections provided in the Traffic Analysis Report are comparable to a medium growth level.

### **Population**

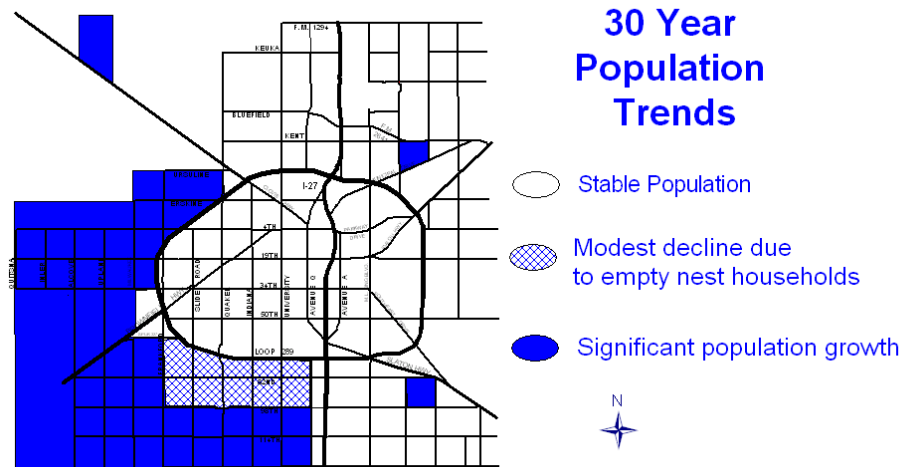
The population in the Lubbock Metropolitan Transportation Planning Area is projected to increase about 24% from 220,866 in 2000 to 273,531 in 2030 (Figure 3-1). This equates to an annual growth rate of 0.7% for the thirty-year period. Over ninety percent of the population and over ninety percent of the employment is within the city limits of Lubbock.

**Figure 3-1: Population Projection MPO Area 2000-2030**



Population growth in Lubbock has been to the west and southwest for the last fifty years and this trend is projected to continue for the next 30 years with the northwest also experiencing housing and population growth as shown in Figure 3-2.

**Figure 3-2: 30-Year Population Trends**





## Households



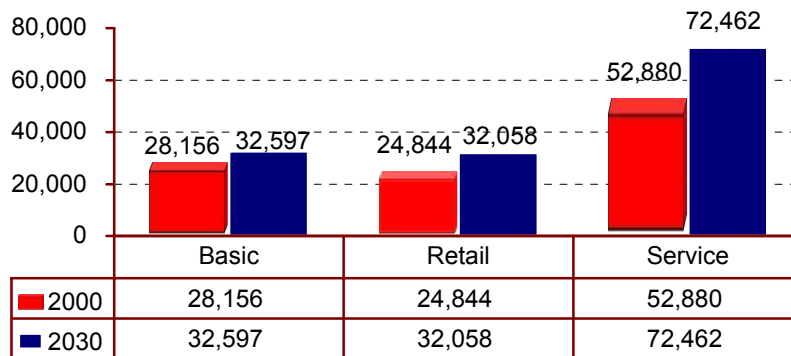
The number of households in the Lubbock Metropolitan Planning Area is projected to grow 27% from 2000 to 2030. Households are increasing at a slightly greater rate than the population. The greater increase in households than population results in a decline in population per household. This rate of decline is anticipated to be slower in the future than what occurred from 1970 to 1990. Lubbock's population per household is lower than average because of the 30,000 persons enrolled in local colleges and universities.

## Employment



Total employment in the Lubbock Area is projected to increase by 30% from 2000 to 2030, an increase of 31,000 employees. The Texas Employment Commission provided the data for the 2000 statistics. LMPO and the City of Lubbock Planning Department provided projections for 2030. Data is provided for service, retail, and basic employment. Service employment includes professional services, government, and educational employment and is projected to increase by 37% from 2000 to 2030. This is the strongest growth area because of the increase in medical service employment. Retail and basic (manufacturing and wholesale trade) employment are projected to increase by 29% and 16% respectively from 2000 to 2030 (Figure 3-3).

**Figure 3-3: Lubbock Metropolitan Planning Area Employment Trends 2000-2030**



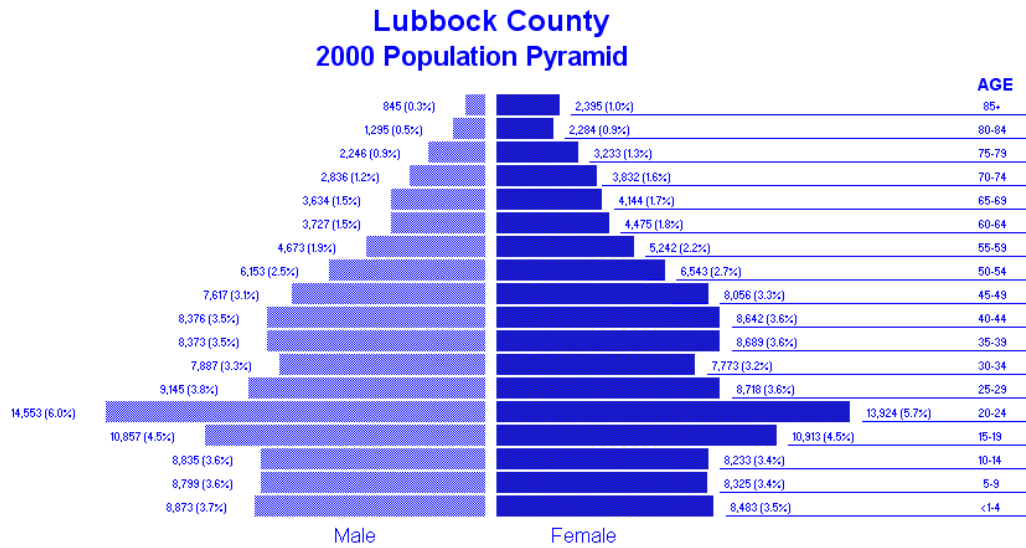
Source: Texas Employment Commission and City of Lubbock Projections

## Age

The City of Lubbock had a median age 29.7 years in 2000 compared to 35.3 for the United States as reported in the 2000 Census of Population and Housing. It is projected that the median age in the City of Lubbock will increase to 34.0 years by 2030 as the population ages and Lubbock continues to develop as a regional retirement center. See Figures 3-4 and 3-5.



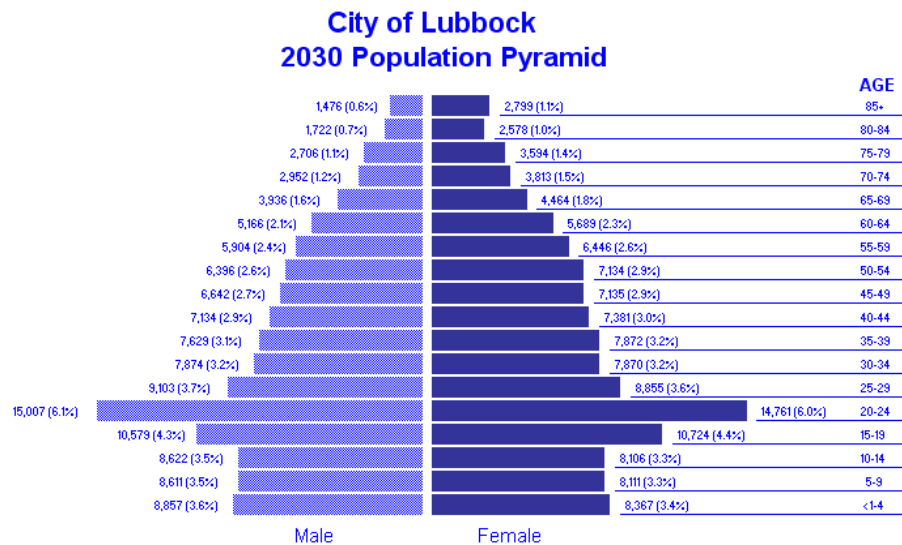
Figure 3.4 City of Lubbock 2000 Population Pyramid



Note: % is a percentage of the Lubbock County Total Population (242,628)

Source: 2000 Census of Population and Housing

Figure 3.5 City of Lubbock 2030 Population Pyramid



Note: % is a percentage of the Lubbock City Projected Total Population (246,015)

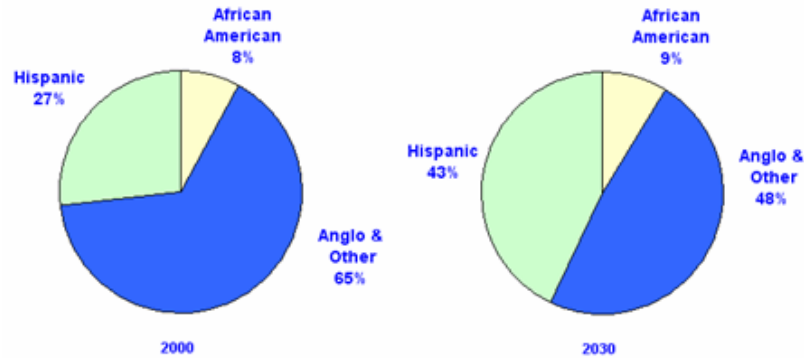
Source: City of Lubbock Planning Department Estimates

## Minority Population



The City of Lubbock, similar to the State of Texas, is projected to have strong growth in the Hispanic population. The Anglo population is projected to decline slightly while the African American population is projected to increase slightly. Lubbock has seen a significant decline in segregation, but there are still parts of the city that are predominately composed of one racial or ethnic group. See Figure 3-6.

**Figure 3.6 City of Lubbock Racial/Ethnic Composition 2000 – 2030**

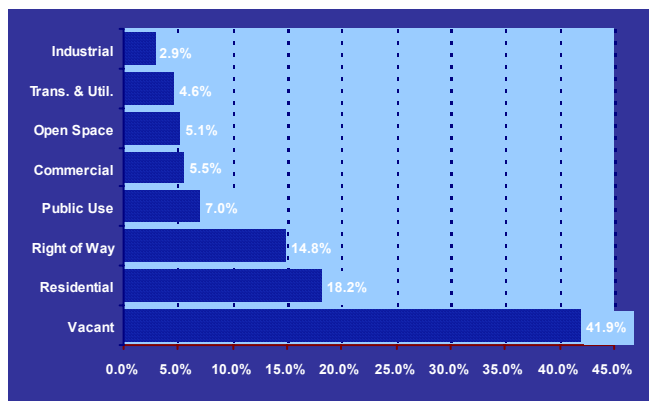


Source: 2000 Census of Population and Housing and  
City of Lubbock Planning Department Projections

## Land Use

In 2000, the Lubbock Metropolitan Planning Area had 75 square miles of full development including the City of Lubbock. This is projected to increase to 86 square miles by 2030. The latest traffic modeling efforts have placed a greater emphasis upon employment statistics than in various land use acreage totals. The City of Lubbock Land Use Data File is continuously updated and can produce reports which detail land uses, housing counts, and business distributions for traffic analysis zones within the Lubbock area. See Figure 3-7.

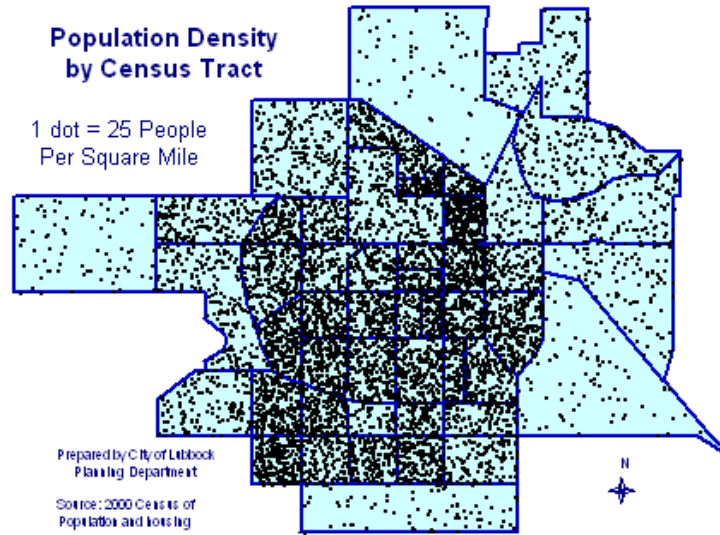
**Figure 3-7: City of Lubbock Percent Land Use 2000**



Source: City of Lubbock Land Use Data File, January 1998

Lubbock, similarly to most cities in the western United States, is not developed with the density that readily supports mass transportation. The automobile is the primary mode of transportation in Lubbock and is projected to remain so in the future. See Figure 3-8.

**Figure 3-8 Population Density City of Lubbock**



The most recent 2000 Census indicated a continuation of the improved lives of most of the citizens of Lubbock. Higher educational attainment is a key element for both individual and community economic progress. Compared to our pioneer ancestors who settled this area we have greater transportation mobility, better access to educational opportunities, and a much more diverse choice of employment opportunities as well as social and recreational activities. See Table 3-1.

**Table 3-1 Selected City of Lubbock Socioeconomic Trends**

	1990	2000	% Change
Population	186,206	199,564	+ 7.2%
College Enrollment	28,322	29,065	+ 2.6%
High School Graduates	75.6%	79.5%	+ 5.2%
College Graduates	26.0%	26.6%	+ 2.3%
Per Capita Income	\$12,322	\$17,511	+ 42.1%
Persons Below Poverty	19.6%	18.4%	- 6.1%
Unemployed	6.7%	6.0%	-10.4%

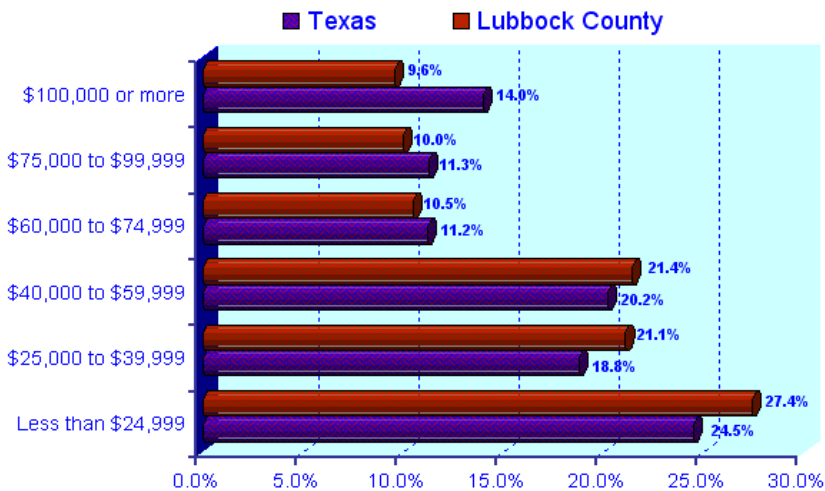
## Special Generators

There are several institutions and facilities, which because of their function generate a large traffic volume. These are called Special Generators. There are over twenty special generators for the Lubbock Metropolitan Planning Area. These institutions include hospitals, regional shopping malls, government headquarters, high schools, and colleges. Additional information, for example parking and facility usage, is gathered for these special generators, which impact the computer traffic simulation model. Projections are prepared for the special generators. See Map 3-1.

## Income

The City of Lubbock determines the income level for the traffic analysis zones from the family income reported in the 2000 Census. The zones are classified as high, medium-high, medium, medium-low, and low by the traffic model. In Lubbock, family income is preferred over household income because the large number of college students tends to artificially lower the household income levels. Although population changes are projected for most traffic analysis zones, income and geographic distribution generally tend to remain constant over a longer period of time. Income levels in Lubbock are lower than average because of the high level of college enrollment and because Lubbock, as a young community, has fewer persons in their peak earning years. The low cost of living, especially housing, compensates for the lower income levels in Lubbock. See Figure 3-9.

**Figure 3-9: Percent Distribution Family Income 1999 for Texas and Lubbock County**

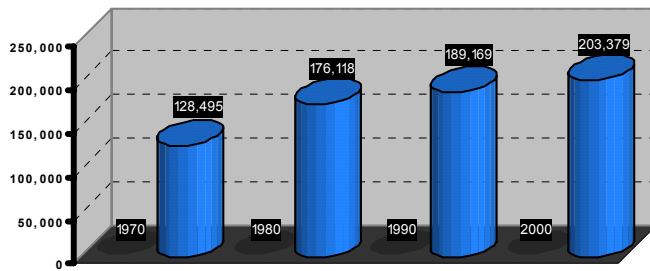


Source: 2000 Census of Population and Housing

## Other Transportation Related Factors

The number of registered vehicles in Lubbock has increased faster than the population in Lubbock County. From 1970 to 2000 the population in Lubbock County increased by 35% while the number of registered vehicles increased by 58% as shown in Figure 3-10.

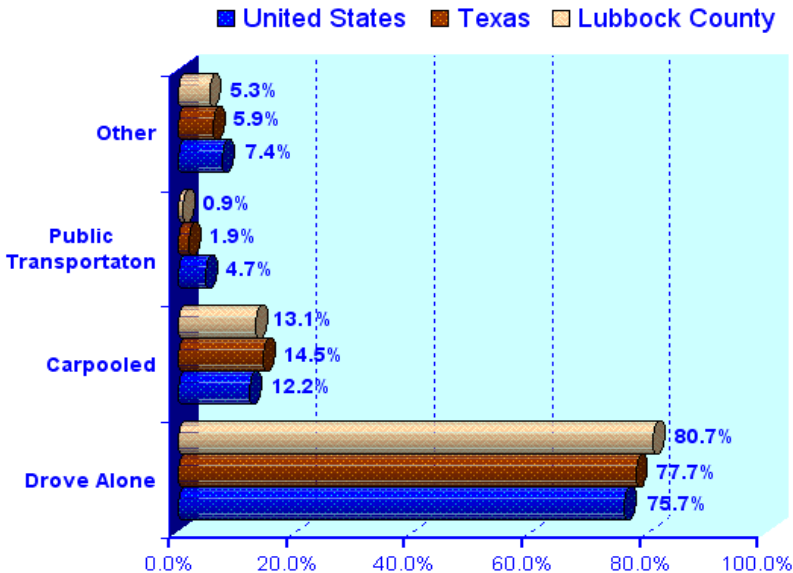
**Figure 3-10: Registered Vehicles Lubbock County 1970 – 2000**



Source: Texas Almanac

Persons in Lubbock are more reliant on the automobile for transportation than average and public transportation and other transportation means such as cycling and walking are not as popular as elsewhere. This is shown in Figure 3-11.

**Figure 3-11: Means of Transportation to Work for Workers 16 years and Over for the United States, Texas and Lubbock County 2000**



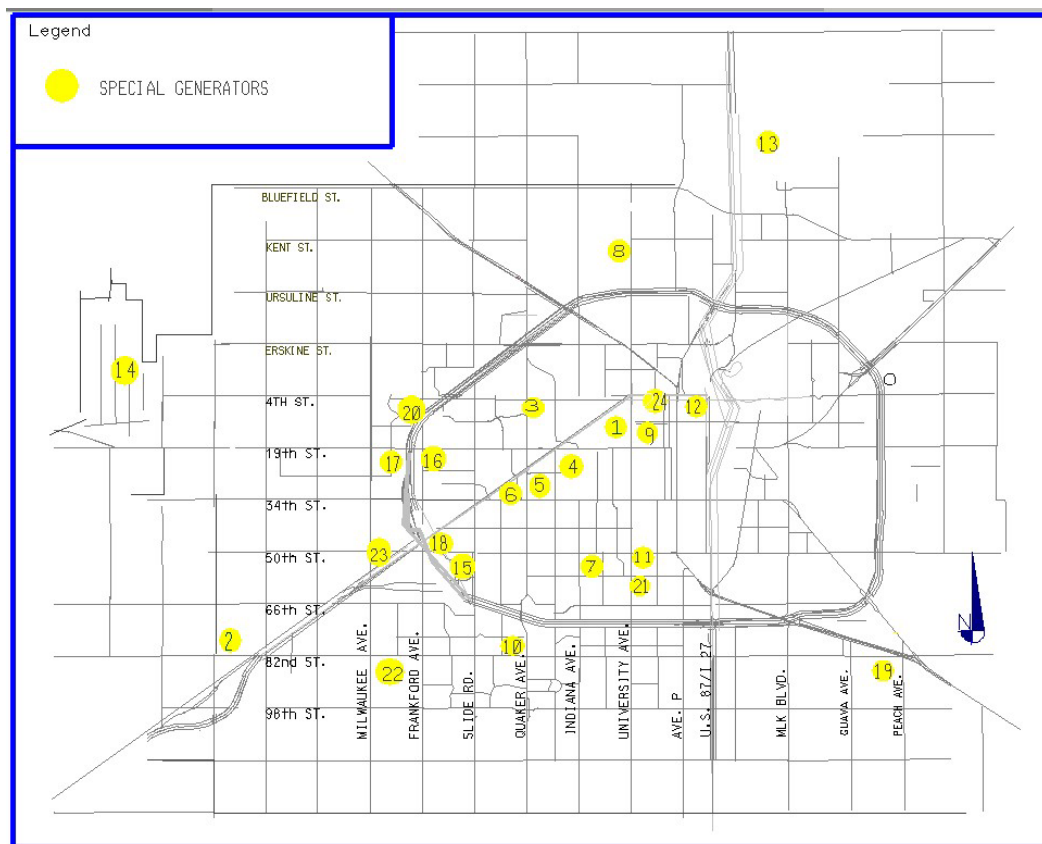
## Community Cohesion

Neighborhood organizations promote civic cohesion and are an important part of an urban area's overall development. Furthermore, they are a measure of the quality of life in a metropolitan area. The City of Lubbock's Neighborhood Services Department works continuously to facilitate communication between the City and all neighborhood groups and to coordinate City services with neighborhood's needs. In 2004 there were more than forty neighborhood associations in Lubbock as is shown in Map 3-2.

**Regional Trends and Demographics Maps**



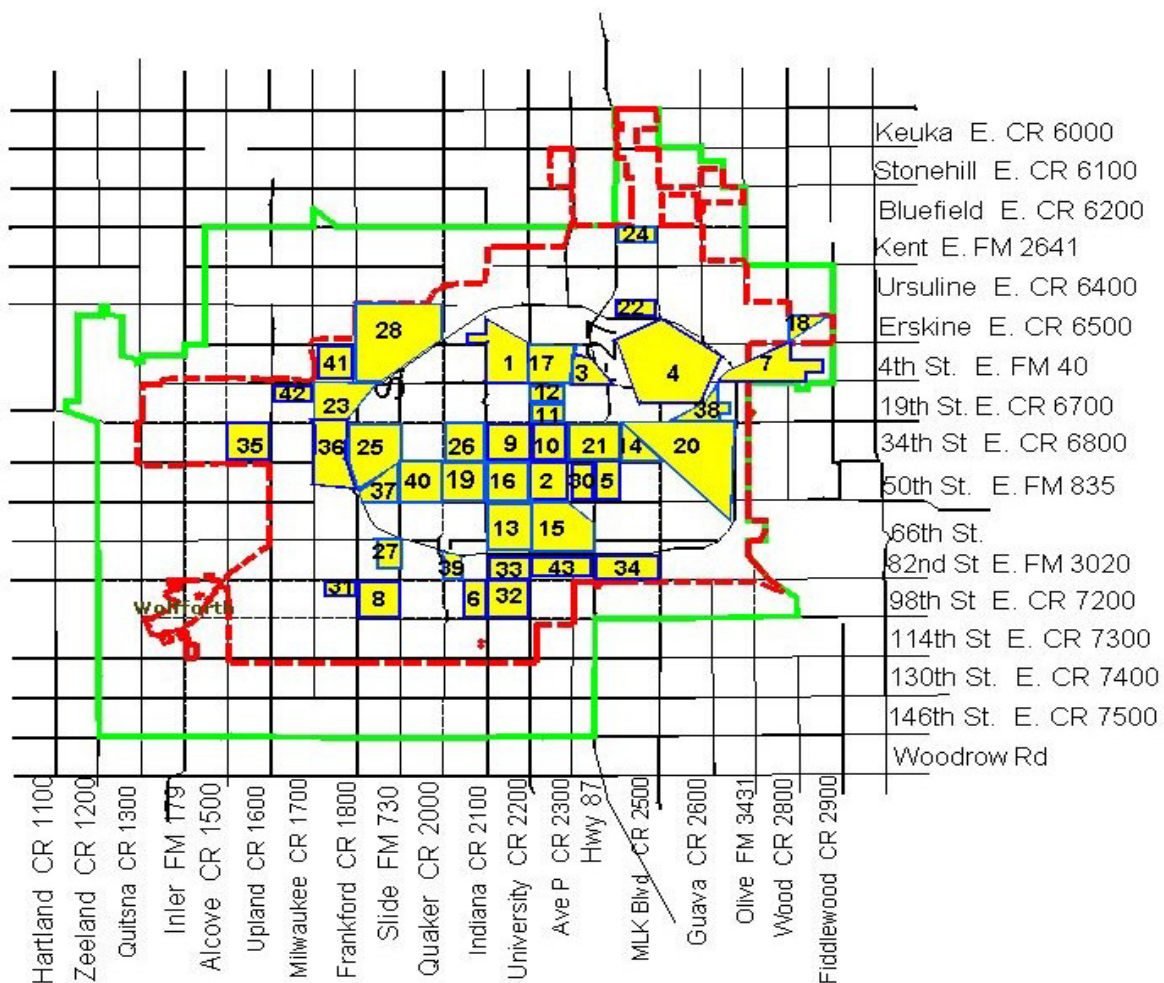
**Map 3-1: Special Generators**



- |                                 |                      |   |
|---------------------------------|----------------------|---|
| 1 Texas Tech University         | 11 Highland Hospital | 15 South Plains Mall                          |
| 2 Frenship High                 | 12 Downtown:         | 16 Lubbock Christian University               |
| 3 University Medical Center/HSC | Lubbock A-J Plant    | 17 Wayland Plaza                              |
| 4 Covenant Hospital             | Federal Building     | 18 NTS  |
| 5 Covenant Lakeside Hospital    | County Courthouse    | 19 Montford Correctional Unit                 |
| 6 Coronado High                 | City of Lubbock      | 20 Walmart/4 <sup>th</sup> Street             |
| 7 Monterey High                 | LISD Administration  | 21 Kmart Supercenter                          |
| 8 State School/SBC              | Civic Center         | 22 Walmart/82 <sup>nd</sup> St. and Frankford |
| 9 Lubbock High                  | 13 Airport           | 23 Canyon West                                |
| 10 Wall-Mart/S. Loop            | 14 Reese Center      | 24 Walmart/4 <sup>th</sup> and Ave. Q         |

Source: Lubbock Metropolitan Planning Organization

Map 3-2: Neighborhood Associations



- |                            |                               |                       |
|----------------------------|-------------------------------|-----------------------|
| 1 Arnett Benson            | 14 Chatman Hill               | 28 North By Northwest |
| 2 Clapp Park               | 15 Bayless – Atkins           | 29 Coronado Area      |
| 3 Guadalupe                | 16 Monterey                   | 30 Ballenger          |
| 4 Parkway and Cherry Point | 17 Jackson – Mahon            | 31 Regal Park         |
| 5 Harwell                  | 18 Bluesky                    | 32 University Pines   |
| 6 Raintree                 | 19 Maedgen Area               | 33 Waters             |
| 7 Chapel Hill              | 20 Dunbar – Manhattan Heights | 34 Southgate          |
| 8 Preston Smith            | 21 Slaton – Bean              | 35 Carlisle           |
| 9 Tech Terrace UNIT        | 22 Clayton Carter             | 36 West End           |
| 10 Heart of Lubbock        | 23 Northridge                 | 37 Wester             |
| 11 South Overton           | 24 Skyview                    | 38 Windmill           |
| 12 North Overton           | 25 Bowie                      | 39 Kings Park         |
| 13 Caprock                 | 26 Maxey Park                 | 40 Stubbs-Stewart     |
|                            | 27 Remington Park             | 41 Shadow Hills       |
|                            |                               | 42 Westchester        |
|                            |                               | 43 South Lubbock      |

Source: Lubbock Metropolitan Planning Organization

## Chapter 4 – Environmental Issues

### Air Quality



The Clean Air Act Amendments of 1990 (CAAA), signed into law on November 15, 1990, provided for a change in the transportation community. The CAAA established a connection between air quality and transportation through the proposed use of sanctions in those areas that do not achieve reductions in vehicle emissions.

There are several air measurement categories that affect transportation and potential decisions on whether sanctions and/or controls will be implemented within a metropolitan area to reduce motor vehicle emissions. Among the measurement categories are ozone, carbon monoxide, and particulate matter sized two and one-half microns and smaller (PM-2.5).

In 1991 the Environmental Protection Agency (EPA) proposed the portion of the Lubbock MPO area located within Loop 289 as non-attainment for the PM-10 standard (predecessor to the PM -2.5 standard), but that designation was dropped by EPA after analyses revealed that the particles were generated by nature rather than by human activity. The Lubbock MPO area is presently in attainment in all air quality categories.

The regional office of the Texas Commission on Environmental Quality (TCEQ) monitors the air in Lubbock for particulate matter and carbon monoxide. If any of the MPO area is classified as non-attainment in the future, this plan will be revised to include projects that will reduce vehicle emissions. Procedures for, and the conduction of, a conformity analysis will also be completed to determine if the projects in the plan will succeed in reducing vehicle emissions.

### Groundwater

The Ogallala Aquifer sits beneath the entire MPO area. The elevation of the water table is relatively high, especially near the playa lakes located at Quaker Avenue and Brownfield Highway and at Quaker Avenue and South Loop 289.

Generally, the water quality in the aquifer is measured every three to five years. The Texas Commission on Environmental Quality, the Texas Railroad Commission, and the Texas Department of Health analyze these samples. The City of Lubbock will continue to monitor and analyze City-owned wells in the area.

Construction and reconstruction of transportation facilities affects the groundwater quality through storm water run-off. Installation of fuel storage tanks facilities also has the potential to impact groundwater quality.

### Wetlands – Including the Playa Lake System

Section 404 of the federal Clean Water Act regulates activities in the Wetlands. The Clean Water act also designates the United States Corps of Engineers as the primary regulatory agency of wetlands and waters of the United States.



Wetlands are described by EPA, 40 CFR 230.0, dated December 24, 1980 and CE, 33 CFR 328.3, dated November 13, 1986, as: *“those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.”*

In some cases, these lakes have been studied by the City of Lubbock determine the expected high water

elevation and the direction each one would overflow. These high water elevations are listed in the Master Drainage Plan, which may be obtained through the City of Lubbock Street/Drainage Engineering Department. The lakes within the Metropolitan Planning Area are depicted in Map 4-1.

Under the Clean Water Act, the discharge of cut or fill material into these wetlands requires a permit from the Army Corps of Engineers. The Corps issues a public notice to inform citizens and government agencies of the proposed project and to solicit public comment. In Texas, government agencies notified for inland wetlands permits include the Environmental Protection Agency, the United States Fish and Wildlife Service and the Texas Parks and Wildlife Department. The Corps evaluates permit applications based upon two standards: regulations developed by EPA in conjunction with the Corps (known as the Section 404(b)(1) guidelines) which set the environmental criteria for permitting projects in wetlands, and factors to determine if the project is in the public interest. Any work within a playa lake must also comply with local ordinances, which can be obtained from the City of Lubbock, City of Wolfforth, or Lubbock County.

## **Stormwater Drainage**

The City of Lubbock is located in an area that has many natural depressions that collect storm water in the playa lakes. Drainage runs on the surface primarily through local streets and flows into the playa lakes. As these playa lakes accumulate water and fill up, they overflow and drain through local streets downstream to the next lake within the playa system. In a very large rain event, this pattern would continue until the water would eventually end up at Yellowhouse Canyon. Between storms, the lakes drain down with evaporation and percolation into the ground, adding to the storage capacity of the system. Stormwater flows are not deliberately directed to any wastewater treatment facility. See Map 4-1

## **Hazardous Materials**



Hazardous materials are those substances or materials that have been determined by the U.S. Department of Transportation to have the potential to impose an unreasonable risk to health, safety, or property when transported in commerce.

Guidance for the designation of hazardous material routes within the Lubbock Metropolitan Area has come from a number of sources. The U.S. Department of Transportation issued proposed rulemaking on the "Transportation of Hazardous Materials: Highway Routing" in 49 CFR 397, dated August 31, 1992. The proposed rules outline factors to consider when designating hazardous material routes.

These factors are:

- Population density
- Type of highway
- Type and quantities of non-radioactive hazardous materials
- Emergency response capabilities
- Results of consultation with affected persons
- Exposure and other risk factors
- Terrain considerations
- Continuity of routes
- Alternative routes
- Delays in transportation
- Climatic conditions
- Congestion

Input has also been received from the Texas Motor Carrier Association, other local governments, and professional engineering firms with expertise in the area of hazardous materials routing.

The Lubbock County Local Emergency Planning Committee (LEPC) developed designated hazardous materials routes in Lubbock County. The hazardous materials routes selected by the LEPC were

approved by the Texas Department of Public Safety in 1995, and are shown in Figures 4-2. They are approved as part of this Plan.

## Endangered Species



The United States Department of Interior, United States Fish and Wildlife Services (USFWS) and the Texas Parks and Wildlife Department (TPWD) maintain records indicating the species of wildlife endangered or threatened in Lubbock County. One endangered and one threatened species spend all or part of the year in Lubbock County.

The USFWS states that endangered whooping cranes (*Grus Americana*) may be encountered in any county in north central Texas during migration. This means the whooping crane may reside in Lubbock County during its migratory period. Bald eagles (*Haliaeetus leucocephalus*) are listed as threatened and are winter residents of Lubbock County. Both of these species prefer isolated areas away from human activity. As a result, provisions of the LMTP are not likely to affect them.

The TPWD also lists the following species as threatened in the region:



- Arctic Peregrine Falcon (*Falco peregrinus tundrius*); possible, unconfirmed, but at periphery of known distribution of species.
- Black-footed Ferret (*Mustela nigripes*); considered extirpated in Texas; potential inhabitant of any prairie dog towns in the general area.
- Texas Horned Lizard (*Phrynosoma cornutum*); confirmed, verified, recent occurrence in the County.

The existing or proposed transportation system should have very little, if any, effect on endangered or threatened species. The heavily urbanized MPO area offers little or no potential habitat for these species.

## Hazardous Materials Route

Hazardous materials currently travel throughout the Lubbock area. A need to limit hazardous materials to specific routes was determined by the Lubbock County Local Emergency Planning Committee (LEPC). A contract with the engineering firm of Parkhill, Smith and Cooper, Inc. (PSC) was obtained to conduct an in-depth study on the feasibility of various routes through Lubbock County. There were numerous routes identified as feasible hazardous materials routes. The feasible routes were generally located on federal and state highways, which include Interstate 27, Loop 289, U.S. 84, U.S. 62/82, and S.H. 114. Map 4-2 graphically depicts the feasible hazardous materials routes. Freight lines in the Lubbock area are routed to major arterials and directed to travel either on Highways 62/82, 84, 114, 87 or Loop 289 or I.H. 27. These routes take the freight vehicles out of the populated areas of the community.

PSC further analyzed routes to determine the risk involved with hazardous materials being confined to each route. The risk analyses documentation is available in the *Engineering Report for the Hazardous Material Route Selection Study*. Based on the findings of this report, the LEPC adopted the final hazardous materials route in November 1994. The routes, shown in Map 4-2, include I.H. 27, U.S. 62/82, U.S. 84, S.H. 114, U.S. 87, and Loop 289 from U.S. 62/82 southwest, north, east, and south to U.S. 87.

## Addressing Environmental Consultation

SAFETEA-LU requires Metropolitan transportation plans (MTPs) to be developed, as appropriate, in consultation with State and local agencies regarding **land use management, natural resources, environmental protection, conservation, and historic preservation**. The consultation shall involve, as appropriate, comparing available plans, maps, or inventories. {References include: 23 USC 134 (i)4, 135(f)2(D), 134(g)1, 135(b)2 and 134 (g)3(B).}

SAFETEA-LU also requires MTPs to include a **generalized discussion of potential environmental mitigation activities and potential areas, including activities that may have greatest potential**. The



mitigation discussion shall be developed in consultation with Federal, State, and Tribal wildlife, land management, and regulatory agencies. {References include: 23 CFR 134(i)2(B), 135(f)4, and 134(g)3(B).}

Below is an illustrative list of environmental agencies the Lubbock MPO contacts for comparison of plans, maps, or inventories, and/or development of a mitigation discussion.

**Federal Environmental Mitigation Agencies**

The Federal Highway Administration  
The Federal Transit Administration  
U.S. Army Corps of Engineers  
U.S. Department of Agriculture  
    U.S. Forest Service  
U.S. Department of the Interior  
    U.S. Fish and Wildlife Department  
    National Park Service  
U.S. Environmental Protection Agency

**State Environmental Mitigation Agencies**

Texas Commission on Environmental Quality  
Texas Fish and Wildlife Department  
Texas State Commission for the Blind  
Texas Department of Transportation  
Texas Department of Agriculture  
Texas Tech University

**Tribal Nations**

Bureau of Indian Affairs – Anadarko Tribal Nation  
Apache Tribe of Oklahoma  
Jicarilla Apache Nation  
Wichita and Affiliated Tribes  
Kiowa Indian Tribe of Oklahoma

**Potential Mitigation Discussion**

Metropolitan transportation planning is a regional process that is used to identify the transportation issues and needs in metropolitan areas. In metropolitan areas over 50,000 in population, the responsibility for transportation planning lies with designated Metropolitan Planning Organizations (MPO). This planning process is a collaborative effort between the member jurisdictions, the Texas Department of Transportation, transit operators, and other modal representatives. During the plans development the MPO examines land development patterns, demographics, travel patterns, and trends to identify existing and future transportation problems. The MPO then identifies alternatives to meet current and projected future demands that will provide a safe and efficient transportation system that meets the needs of the traveling public while limiting adverse impacts to the environment. This region is designated as an MPO area and all the jurisdictions in this region work together to develop a constrained long-range transportation plan.

The constrained long-range transportation plan (CLRP) for this region identifies and recommends a capital investment strategy to meet the existing and future transportation needs of the public over the next 25 years. The inclusion of a recommended improvement in the long-range transportation plan represents preliminary regional support for that improvement. The CLRP is a decision-making tool to determine which projects should be implemented. Transportation improvements go through several steps from conception to implementation and take many years to successfully complete.



The considerations and recommendations made during the planning process are preliminary in nature. Detailed environmental analysis conducted through the National Environmental Policy Act (NEPA) does not apply to long-range transportation plans. With exceptions for regional ambient air quality, offsetting environmental impacts during the long-range planning process is not required. While detailed environmental analysis is not required, it is important to consult with environmental resource agencies during the development of a long-range transportation plan. This interagency consultation provides an opportunity to compare transportation plans with environmental resource plans, develop a discussion on potential environmental mitigation activities, areas to provide the mitigation, and activities that may have the greatest potential to restore and maintain the environment.

Detailed environmental analysis of individual transportation projects occurs later in the project development process as the improvement approaches the preliminary engineering stage. At this stage, project features may be narrowed and refined, and the environmental impacts and environmental mitigation strategies can be appropriately ascertained. TxDOT's Environmental Manual directs the project-by-project interagency review, study, and identification of environmental concerns. Related requirements that typically apply at this stage involve public hearings, environmental permit processing, and NEPA studies. Usually, a variety of environmental documentation, permit, and mitigation needs are identified and environmental findings are closely considered and evaluated. Common project environmental mitigation measures (required silt-fence barriers, precautions to control dust, etc) are managed using TxDOT's Roadway Design Manual, AASHTO's Standard Specifications for Highway Bridges, TxDOT's Standard Specification for Construction of Highways, Streets, and Bridges that apply to all construction activities. Special environmental concerns, however, may differ widely by project and location. As environmental studies are conducted and undergo public and interagency review, needed mitigation plans are specified and committed to within the environmental documents on the particular transportation project or activity. Environmental management systems then are used to monitor, and ensure compliance with, the environmental mitigation commitments.

Potential environmental mitigation activities may include: avoiding impacts altogether, minimizing a proposed activity/project size or its involvement, rectifying impacts (restoring temporary impacts), precautionary and/or abatement measures to reduce construction impacts, employing special features or operational management measures to reduce impacts, and/or compensating for environmental impacts by providing suitable, replacement or substitute environmental resources of equivalent or greater value, on or off-site. Where on-site mitigation areas are not reasonable or sufficient, relatively large off-site compensatory natural resource mitigation areas generally may be preferable, if available. These may offer greater mitigation potential with respect to planning, buffer protection, and providing multiple environmental habitat value (example: wetland, plant, and wildlife banks).

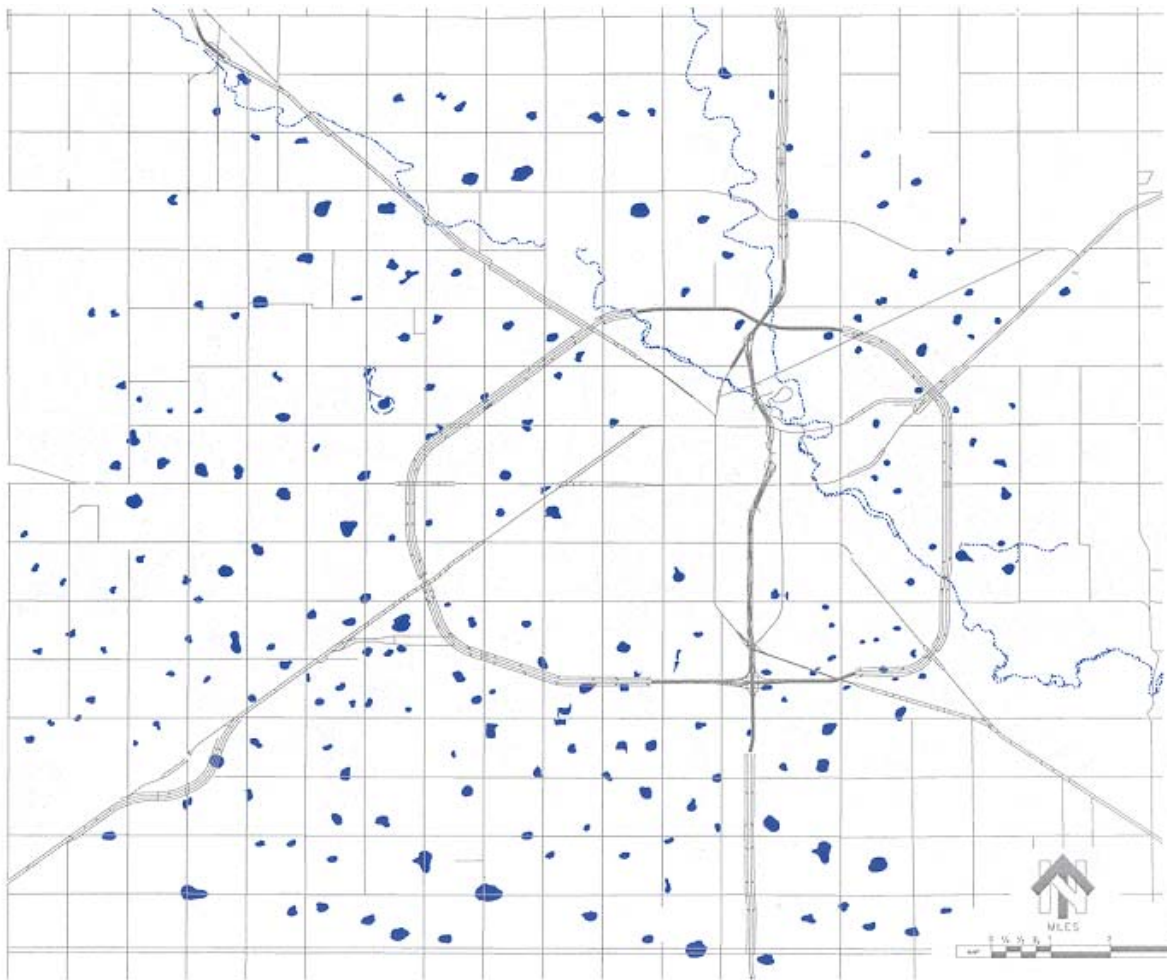
Mitigation activities and the mitigation areas will be consistent with legal and regulatory requirements relating to the human and natural environment. These may pertain to neighborhoods and communities, homes and businesses, cultural resources, parks and recreation areas, wetlands and other water sources, forested and other natural areas, agricultural areas, endangered and threatened species, and the ambient air. Table 4-1 illustrates some potential mitigation activities and potential mitigation areas for these resources:

**Table 4-: Potential Mitigation Activities and Potential Mitigation**

<b>Resource</b>	<b>Key applicable requirements</b>	<b>Potential mitigation activities for project implementation</b>	<b>Potential mitigation areas for project implementation</b>
Neighborhoods and communities, and homes and businesses	Uniform Relocation Assistance and Real Property Acquisition Policy Act at 42 USC 4601 et seq	Impact avoidance or minimization; context sensitive solutions for communities (appropriate functional and/or esthetic design)	Mitigation on-site or in the general community. (Mitigation for homes and businesses is in accord with 29 CFR 24)
Cultural resources	National Historic Preservation Act at 16 USC 470	Avoidance, minimization; landscaping for historic properties; preservation in place or excavation for archaeological sites; Memoranda of Agreement with the Department of Historic Resources; design exceptions and variances; environmental compliance monitoring	On-site landscaping of historic properties, on-site mitigation of archeological sites; preservation in place
Parks and recreation areas	Section 4(f) of the U.S. Department of Transportation Act at 49 USC 303	Avoidance, minimization, mitigation; design exceptions and variances; environmental compliance monitoring	On-site screening or on-site replacement of facilities; in some cases, replacement of affected property adjacent to existing
Wetlands and water resources	Clean Water Act at 33 USC 1251-1376; Rivers and Harbors Act at 33 USC 403	Mitigation sequencing requirement involving avoidance, minimization, compensation (could include preservation, creation, restoration, in lieu fees, riparian buffers); design exception and variances; environmental compliance monitoring	Based on on-site/off-site and in-kind/out-of-kind sequencing requirements; private or publicly operated mitigation banks used in accordance with permit conditions
Forested and other natural areas	Agricultural and Forest District Act (Code of VA Sections 15.2-4305; 15.2-4307-4309; 15.2-4313); Open Space Land Act (Section 10.1-1700-1705; 1800-1804)	Avoidance, minimization; Replacement property for open space easements to be of equal fair market value and of equivalent usefulness; design exceptions and variances; environmental compliance monitoring	Landscaping within existing rights of way; replacement property for open space easements to be contiguous with easement; replacement of forestry operation within existing agriculture/forestal district
Agricultural areas	Farmland Protection Policy Act of 1981 at 7 USC 4201-4209, Agricultural and Forest District Act (Code of VA Sections 15.2-4305; 15.2-4307-4309; 15.2-4313	Avoidance, minimization; design exceptions and variances; environmental compliance monitoring	Replacement of agricultural operation within existing agriculture/forestal district
Endangered and threatened species	Endangered Species Act at 16 USC 1531-1544	Avoidance, minimization; time of year restrictions; construction sequencing; design exceptions and variances; species research; species fact sheets; Memoranda of Agreements for species management; environmental compliance monitoring	Relocation of species to suitable habitat adjacent to project limits
Ambient air quality	Clean Air Act at 42 USC 7401-7671; and conformity regulations at 40 CFR 93	Transportation control measurements; transportation emission reduction measures	Within air quality non-attainment and maintenance areas

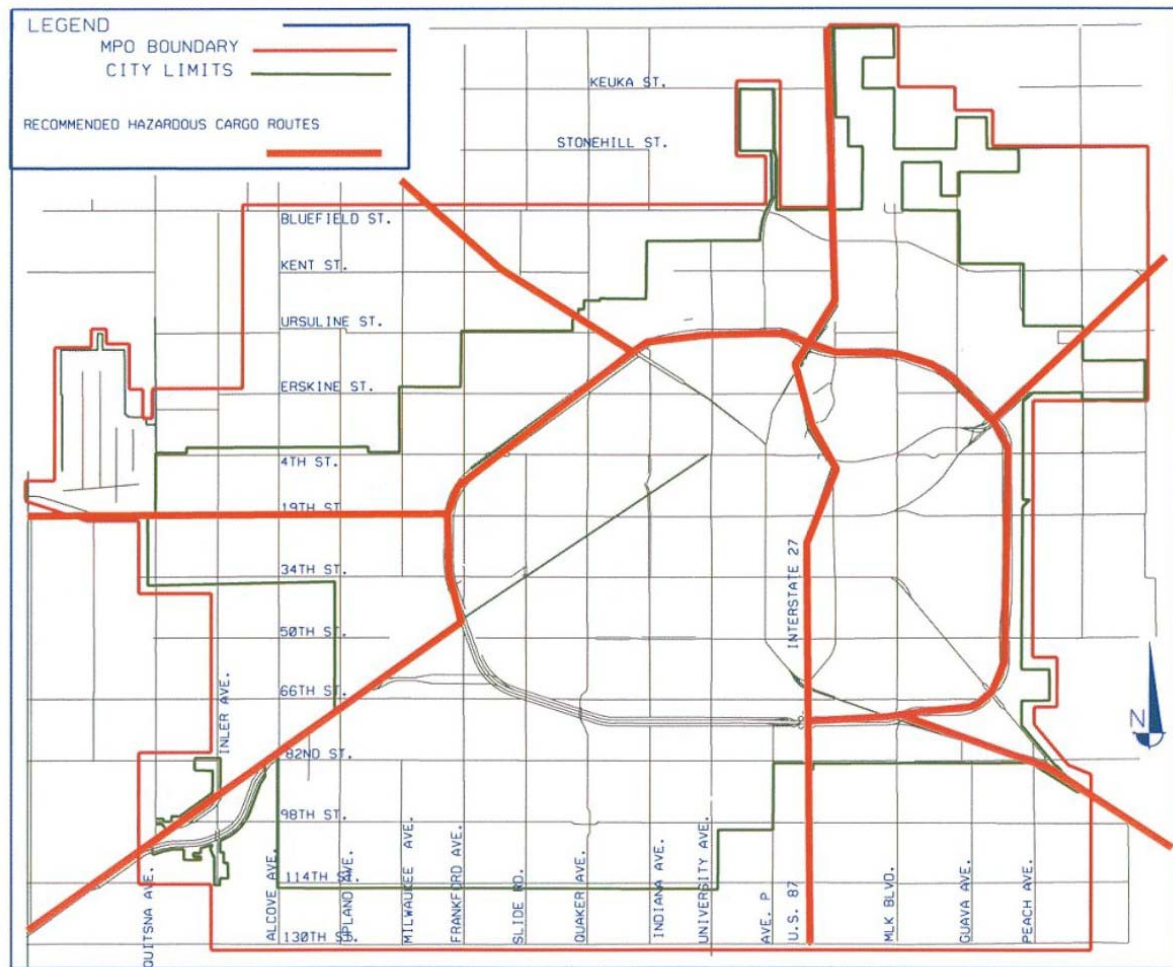
## **Environmental Issues Maps**

**Map 4-1: Metropolitan Area Playa Lakes**



Source: Lubbock Metropolitan Planning Organization

**Map 4-2: Approved Hazardous Materials Routes**



Source: Lubbock Metropolitan Planning Organization and TxDOT



## **Chapter 5 – Streets and Highways**

### **Transportation System Elements**

This chapter outlines the various elements making up the transportation system in the Lubbock Metropolitan Area. Simply stated, a transportation system is a means of moving people and goods. The system is comprised of streets creating a network on which people and goods move. These streets are classified by function, allowing planning activities to enhance access on the network. Also included in the transportation system is consideration to the elements that directly impact the street network, such as public transportation, land use development, local portions of the interstate highway system, hazardous material movement, congestion and pavement concerns, and intermodal transportation programs. Projects in this plan are the result of various programs and are incorporated into the Transportation Improvement Program (TIP) as funding and necessity dictates.

### **Thoroughfare Plan**







The City of Lubbock's Thoroughfare Plan, adopted by the MPO was revised in 2006 and adopted by the City of Lubbock and the Lubbock Metropolitan Planning Organization in 2007. The Thoroughfare Plan is the foundation for the transportation network in the MPO. The Thoroughfare Plan classifies the existing street system and proposes future thoroughfares and collector routes.

Major roadways generally lie on one-mile lines throughout the Metropolitan Area. Exceptions include: Loop 289, U.S. 84 and U.S. 62/82. The grid pattern conforms to past and current development in Lubbock and is expected to continue. Typical sections currently used within the Metropolitan Area for purposes of platting and design have been adopted in the Thoroughfare Plan. In the 2007 revision of these sections, allowances were made to accommodate bicyclists, providing shared lanes on arterial roads. These accommodations are dependent on various criteria, such as cost increase, existing development, etc. The Thoroughfare Plan and its subsequent revisions are, and will remain, a part of this Plan. See Map 5-1.

### **Functional Classification**

Functional classification is the process by which streets and highways are grouped into classes, or systems, according to the character of service they are intended to provide. Basic to this process is the recognition that individual roads and streets do not serve travel independently in any major way. Rather, most travel involves movement through a network of roads. It becomes necessary then to determine how this travel can be channelized within the network in a logical and efficient manner. Functional classification defines the nature of this channelization process by defining the part that any particular road or street should play in serving the flow of trips through a highway network. FHWA Functional Classification Guidelines can be found at: [http://www.fhwa.dot.gov/planning/fcsec2\\_1.htm](http://www.fhwa.dot.gov/planning/fcsec2_1.htm). Lubbock Functional Classification System was approved on August 21, 2006. The functional classifications are defined in Table 5-1.

**Table 5-1: Functional Classifications**

<b><u>Functional Class and Level of Mobility and Access</u></b>	
<p><b><u>Freeway</u></b></p> <p>A limited highway with no traffic stops and grade-separated interchanges at major thoroughfares. Intended for high-speed traffic movement between cities across the metropolitan area. Not intended to provide direct access to adjacent land. Example: IH – 27.</p>	
<p><b><u>Expressway</u></b></p> <p>A limited access highway with some grade crossings and signals at major intersections. Intended for high-volume, moderate to high-speed traffic across the metropolitan area with minimal access to adjacent land. Example: South Loop 289.</p>	
<p><b><u>Principal Arterial</u></b></p> <p>A street primarily intended to provide for high-volume, moderate-speed traffic between major activity centers. Access to abutting property is subordinate to major traffic movement and is subject to necessary controls of entrance and exit. Example: 82<sup>nd</sup> Street. Shown: Quaker Avenue at 82<sup>nd</sup> Street.</p>	
<p><b><u>Arterial</u></b></p> <p>A street which augments and feed the principal arterial system and is intended for moderate-volume, moderate-speed traffic. Access to abutting property is partially controlled. Example: Slide Road and 50<sup>th</sup> Street. Shown: Slide Road at 50<sup>th</sup> Street.</p>	
<p><b><u>Collector</u></b></p> <p>A street which collects and distributes traffic to and from local and arterial streets. Intended for low to moderate-volume, low-speed, and short-length trips while also providing access to abutting properties. Example: Memphis Avenue. Shown: Memphis Avenue at 82<sup>nd</sup> Street</p>	
<p><b><u>Local</u></b></p> <p>A street for low-volume, low-speed, and short-length trips to and from abutting properties. Example: Lynnhaven Avenue.</p>	

## **National Highway System (NHS)**

With the interstate system complete, lawmakers authorized, in Section 1006 of the ISTEA, the development of a National Highway System (NHS). The purpose of the NHS is to “provide an interconnected system of principal arterial routes which will serve major population centers, international border crossings, ports, airports, public transportation facilities and other intermodal transportation facilities and other major travel destinations; meet national defense requirements; and serve interstate and interregional travel.”

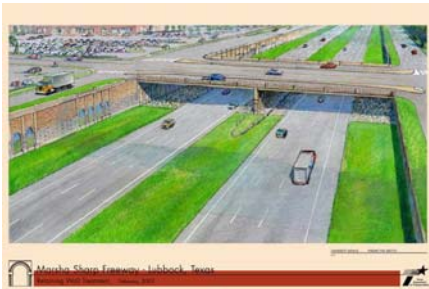
The NHS for Texas includes 7,902 rural miles and 5,038 urban miles for a total of 12,940 miles of streets and highways. The Lubbock metropolitan Area includes the Interstate System, Strategic Highway Corridor Network (STRAHNET), major STRAHNET connector routes, and congressional high priority corridors.

In the development of the NHS, the LMPO took into account connections to the rural NHS at the Urban Boundary. All of the rural NHS routes connect to Loop 289, which encompasses a large portion of the City of Lubbock. There were continuous connections made through the area on U.S. 62/82 and I.H. 27/U.S. 87 routes. These two through routes provide both North/South and East/West connections across Lubbock. Other NHS routes were selected based on traffic volumes, location, and connectivity to Reese Center and the Lubbock International Airport. Each of the routes selected are functionally classified as principal arterial routes. The local NHS, as approved in May 1993, consists of 73.7 miles of state highways and city streets. The approved NHS is shown in Map 5-2.

## **Major Corridors**

Five major corridors are constructed, planned or under construction within the Lubbock Metropolitan Area at the time of preparation of this plan.

### **Marsha Sharp Freeway (US 62/82)**



The Marsha Sharp Freeway, listed in the Project Listings, consists of the upgrading of U.S. 62/82 from 82<sup>nd</sup> Street to I.H. 27 to freeway status. This project has been under way for many years and Phases 1 through 5 are projected for completion during the life of this plan. The Marsha Sharp, when completed, will provide a freeway facility from the City of Wolfforth to the East Loop 289.

The Marsha Sharp Freeway has been phased, and construction has begun, resulting in funding for a number of Loop 289 projects, the 50th Street project connecting to Loop 289 on the west, and a number of projects along U.S. 82.

### **Ports-To-Plains Corridor**



The TEA-21 legislation listed the Ports to Plains corridor as a Congressional High Priority Corridor. This corridor runs from the Mexican border to Denver, Colorado, via I-27. Application has been made to provide planning funding for the study of an extension of I.H. 27 from Lubbock to connect to the Mexican border on the south, and U.S. 287 on the northwest corner of the state. TxDOT is overseeing this effort from the Division of Planning and Programming located in Austin, Texas. Once the study is completed, it will then be decided if the project will go forward. This study should cover the necessary requirements for a major investment analysis on this project. Projects pertaining to the extension will be incorporated into this Plan when appropriate.

### **La Entrada al Pacifico**



The purpose of the La Entrada al Pacifico Corridor is to increase the efficiency of transportation of goods and people from Pacific Coast ports in Mexico northeast to Midland-Odessa, Texas. Mexican ports, such as the Port of Topolobampo, are potentially viable alternatives to the congested ports of Los Angeles and Long Beach. Additionally, the underutilized border crossing at Presidio, Texas, is an opportunity to divert traffic from the already overburdened crossing at El Paso, Texas.

### **Outer Loop**

The Texas Department of Transportation has hired a consultant to perform a feasibility study for an outer loop. This feasibility study will determine whether an outer loop is necessary and if needed, its location and scope of the project. The purpose of the Outer Loop Study is to determine a preferred route alternative for an Outer Loop around the city of Lubbock, Texas. This study is to investigate, through a fatal flaw analysis, improvements and continued development of a preferred route. The Outer Loop corridor study will follow the NEPA process including the necessary public involvement process. The first Phase will be a feasibility study and will determine if there is a true need for an outer loop. If applicable, the second Phase will be a route study, based on the results of the outer loop feasibility study.

### **Northwest Passage**

With increased development in the Northwest portion of the Lubbock Metropolitan Area there is a need for improvement of the transportation network. The Northwest Passage area is generally bordered US 84 on the north, Frankford Avenue on the West, just south of 4<sup>th</sup> Street on the south and the intersection of US 84 and Loop 289 on the east. The planning has already begun for this project and the projects are included in this plan. The planned projects will include new capacity and interchange improvements where Slide Road intersects North Loop 289, as well as, improvements to Slide Road from 4<sup>th</sup> Street to the Clovis Highway (US 84), Erskine Street, additional lanes on Loop 289, and improvements where Loop 289, Erskine, Quaker, and Texas Tech Parkway merge. Completion of the projects contained in the Northwest Passage plans will provide safer travel, less congestion and increased opportunity for further economic growth. See Map 5-3.

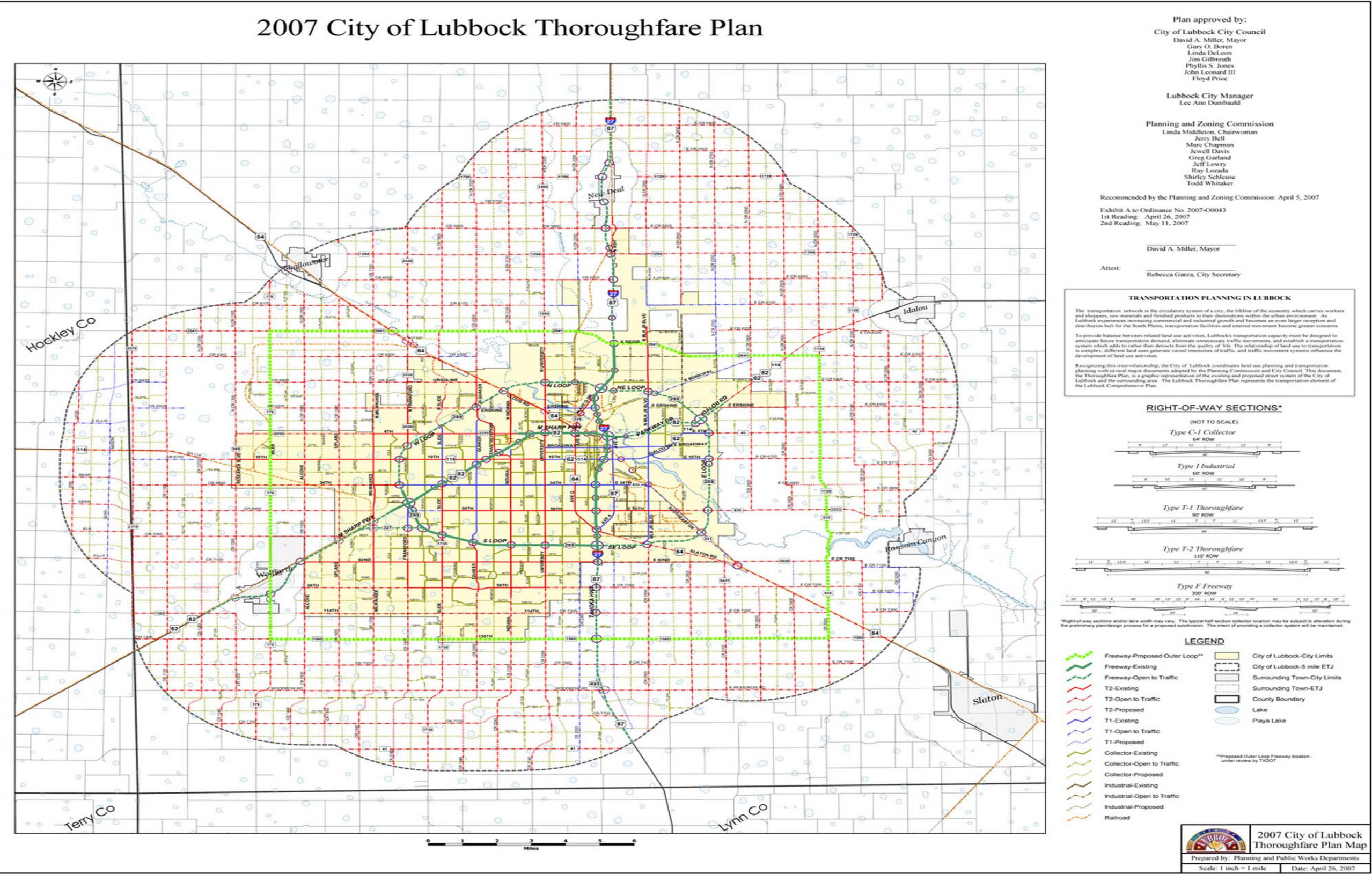
### **South Loop 289 Ramp Access Study**

The purpose of the South Loop 289 Ramp Access Study is to identify different alternatives and to determine the level of service and costs of each alternative. The study process will place significant emphasis on the community context and the implications of the resulting transportation strategy recommendations on improving mobility, economic competitiveness, as well as the quality of life for the communities served by the proposed transportation improvement. The final product will be recommendations for the optimal configurations to be implemented along the corridor, a staged implementation plan, as well as strategies to incorporate elements of transportation system management, transportation demand management, freight movement, hazardous cargo movement, and the use of intelligent transportation highway systems, as appropriate.

## **Streets and Highways Maps**

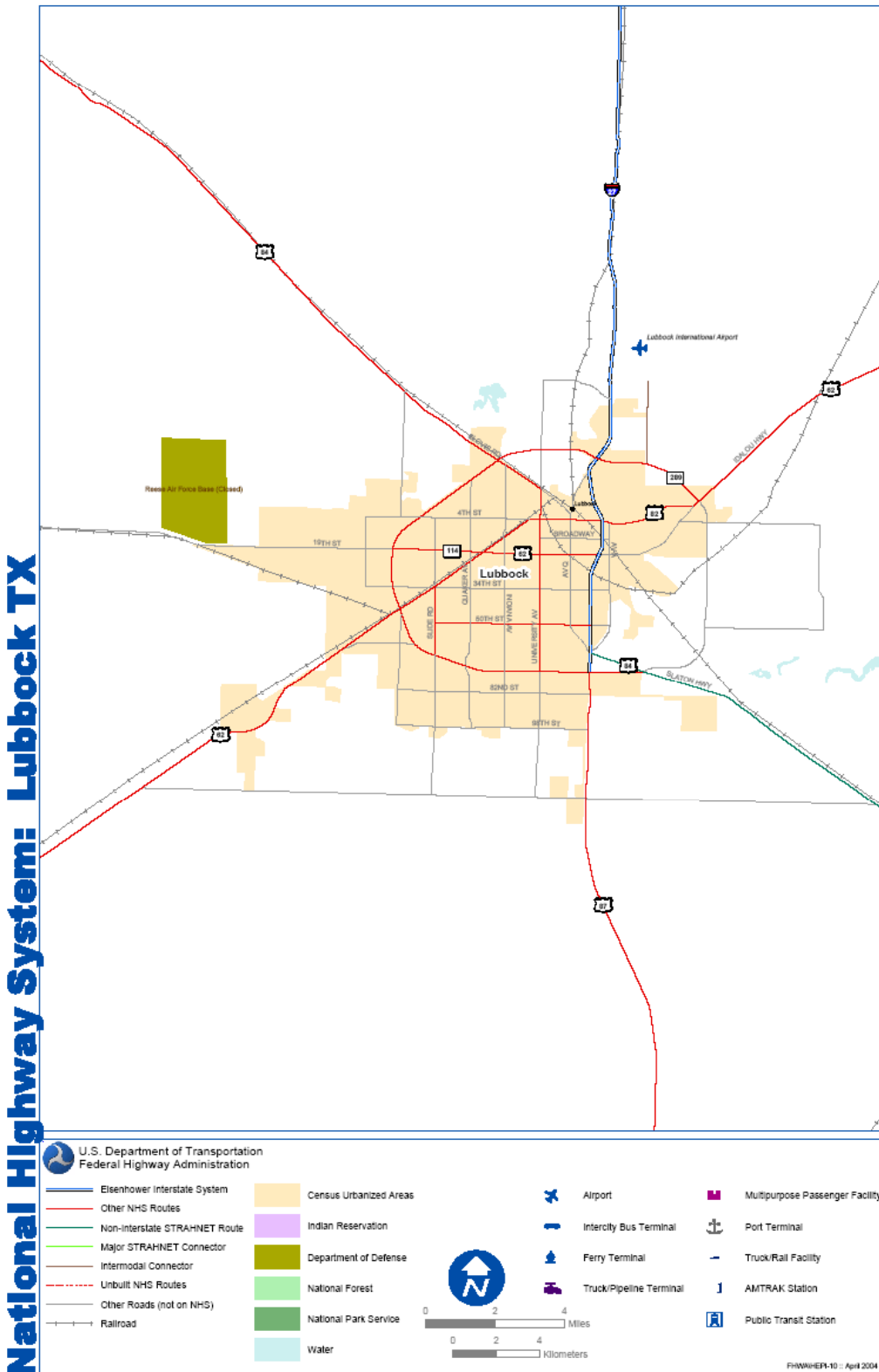


Map 5-1: City of Lubbock Thoroughfare Plan

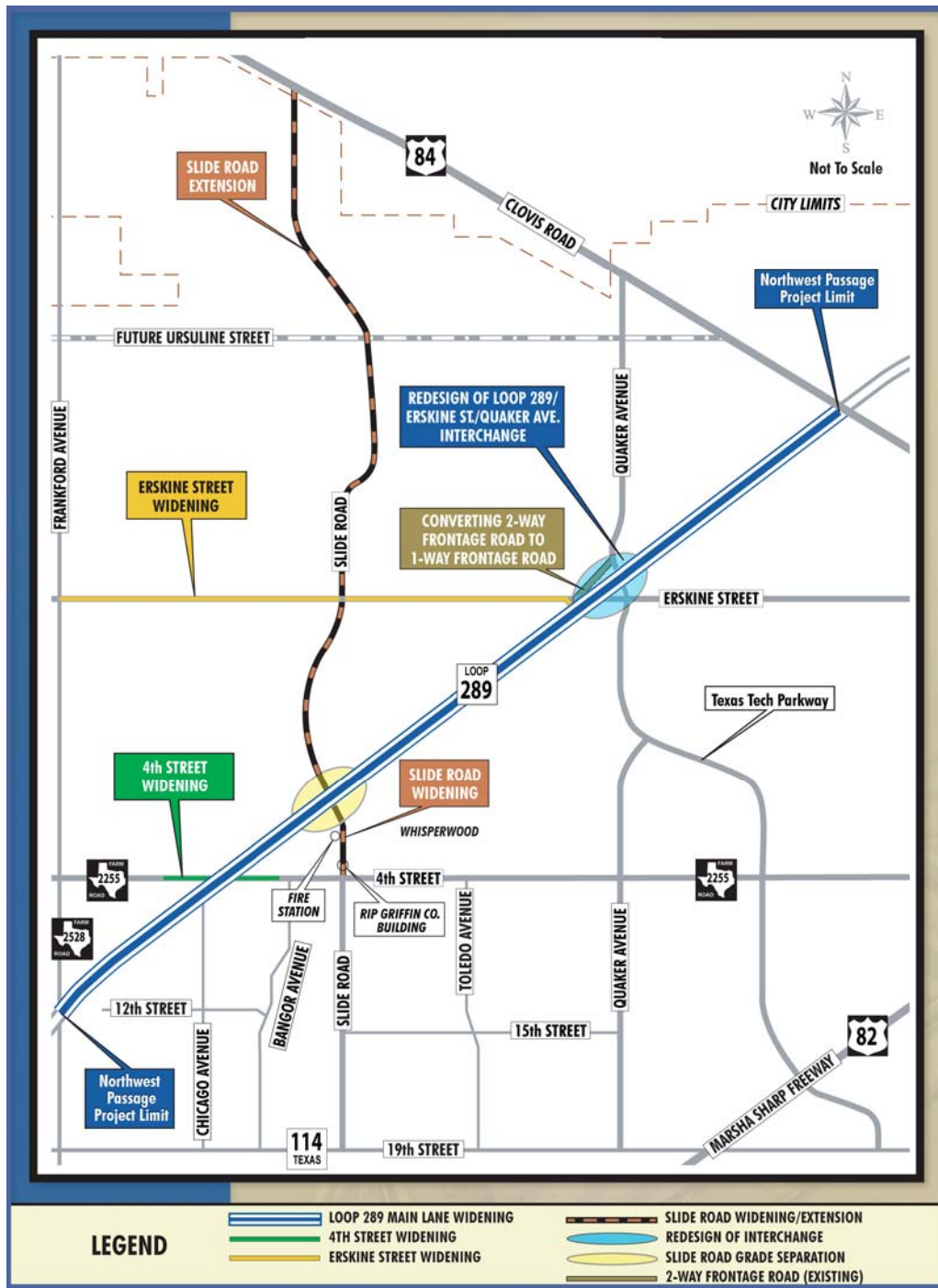




Map 5-2: Lubbock Urbanized Area National Highway System



Map 5-3: City of Lubbock Northwest Passage



Source: City of Lubbock

## Chapter 6 – Public Transportation

### Introduction

Public transportation plays a vital role in promoting social and economic health in a community, as it offers affordable transportation options to the citizens of the community. To this end, Citibus' mission statement states:

**Citibus is committed to providing quality, reliable, accessible, economical, and safe transportation service to all citizens while constantly striving for improvements.**

The services that Citibus offers include:

- Fixed route service
- CitiAccess (paratransit)
- NiteRide (late night, shared ride service)
- Texas Tech University services
- Game-day shuttles for football and basketball
- Special services

In addition, Citibus is the regional contractor for the Medicaid non-emergency medical transportation program.

### Primary Strategic Issues

During 2004, the Lubbock City Council appointed the Public Transportation Strategic Planning Task force. This seven-member group formulated the following list of strategic issues:

- Funding doesn't match mission. (Identified as a weakness)
- Loss of state and federal funding. (Identified as a threat)
- Understanding/perception of what Citibus does. (Identified as a weakness)
- Build upon partnerships and auxiliary enterprises. (Identified as an opportunity)
- Increased regulations and unfunded mandates. (Identified as a threat)
- Access to all parts of the city. (Identified as a weakness)
- Need better building/facility/technology/security. (Identified as a weakness)

Citibus and the City of Lubbock continue to work toward addressing these issues, seeking creative remedies in order to more fully meet the transportation needs in the city.

### Regional Coordination

As mandated by the Texas Department of Transportation, each region in the state developed its own regionally coordinated transportation plan. Citibus served as the lead agency for South Plains region, which encompasses 15 counties. The final plan was submitted to the state in December 2006. Citibus received funding from TxDOT to continue planning efforts through FY 2007; during this time, the plan will be revised to bring proposed project listings in compliance with Jobs Access Reverse Commute and New Freedom program requirements.

Transportation services in the region are provided by three public providers, one urban and two rural.

*Lubbock Metropolitan Transportation Plan Fiscal Year 2007-2032*

CapTrans is a division of Caprock Community Action Association and is headquartered in Crosbyton. CapTrans provides service in Crosby, Dickens, Floyd, Hale, King, and Motley counties. When compared to the entire region, the CapTrans service area has the following statistics:

	Square Miles	Population (2000 Census)	Population (2004 Estimate)	% Change 2000-2004	Actual Change	% with Disabilities	% Persons Below Poverty	% Persons 65 years and older
CapTrans Service area	5,702	55,989	54,345	-2.94%	-1,644	18.7%	19.4%	23.7%
Entire region	13,705	367,871	383,840	+1.58%	+5,969	17.8%	20.9%	14.8%
State	261,797	20,851,820	22,490,022	+7.3%	+1,638,202	16.0%	15.4%	9.9%

CapTrans' transportation centers are located in every county except King. CapTrans provides service from Monday-Friday from 6:00 a.m. to 6:00 p.m.; special provisions are made for Medicaid non-emergency medical transportation that is outside of these day and times. Vehicles vary in size and range from seven to 22 passengers; most vehicles are equipped with wheelchair lifts.

SPARTAN is the transportation division of the South Plains Community Action Association; its offices are located in Levelland. SPARTAN's service area includes Bailey, Cochran, Garza, Hockley, Lamb, Lynn, Terry, and Yoakum counties. Their service area has the following statistics:

	Square Miles	Population (2000 Census)	Population (2004 Estimate)	% Change 2000-2004	Actual Change	% with Disabilities	% Persons Below Poverty	% Persons 65 years and older
SPARTAN Service area	7,193	79,254	78,477	-0.98%	-777	19.5%	19.6%	11.5%
Entire region	13,705	367,871	383,840	+1.58%	+5,969	17.8%	20.9%	14.8%
State	261,797	20,851,820	22,490,022	+7.3%	+1,638,202	16.0%	15.4%	9.9%

In FY2005, SPARTAN carried 106,262 passengers, operated 44,326 service hours, and traveled 758,158 revenue miles.

Citibus operates within the city limits of Lubbock, and provides fixed route, paratransit, university, and special transportation services.

	Square Miles	Population (2000 Census)	Population (2004 Estimate)	% Change 2000-2004	Actual Change	% with Disabilities	% Persons Below Poverty	% Persons 65 years and older
City of Lubbock	119	199,564	206,481	+3.46%	+6,917	12.3%	18.4%	11.5%
Entire region	13,705	367,871	383,840	+1.58%	+5,969	17.8%	20.9%	14.8%
State	261,797	20,851,820	22,490,022	+7.3%	+1,638,202	16.0%	15.4%	9.9%

In FY2005, Citibus carried a total of 3,779,325 passengers on the entire system. In FY2006, that number was 3,575,466.

Participants in the regional process included representative of the following:

Citibus  
 SPARTAN – South Plains Community Action Agency  
 CapTrans – Caprock Community Action Agency

Sexton Enterprises  
South Plains Association of Governments  
Lubbock Regional MHMR  
Texas Department of Transportation – Medical Transportation Program  
Texas Department of Transportation – Public Transportation Coordinator  
West Texas Opportunities  
Lubbock Metropolitan Planning Organization  
WorkSource of the South Plains  
Panhandle Community Services  
Texas Department of Health and Human Services  
Lubbock Adult Day Care and Health Center

The group formulated the following goals for coordination in the region:

- To meet the objectives for both human service and public transportation programs
- To do more with limited resources
- To enhance mobility within and between communities
- To preserve individual independence
- To enhance quality of life
- To generate new revenues
- To reduce the cost of providing individual trips
- To increase efficiency and productivity of transportation services
- To build a consensus on how to use available resources

As a function of a large area, sparse populations, and tight transportation budgets, the group did not identify significant overlaps in service.

The group identified the following unmet needs:

- Lack of service to major job training/educational facilities
- Inadequate fixed route service in the city of Lubbock
- Aging vehicles
- Need for a central place for rural passengers to wait while awaiting their return trip
- High trip costs (for unsubsidized trips) on rural providers, which often makes it more cost-effective for agencies to provide fuel vouchers or to directly provide the service themselves
- Need for a centralized transportation information system
- Need for travel training
- Need for consistent and reliable transportation in rural areas, particularly for senior citizens
- Accessible taxis

The group identified five projects that could be funded through Jobs Access Reverse Commute (JARC) or New Freedom (NF) funding:

Proposed JARC projects:

- Service to job training/educational programs at Reese Center
- Funding the cost of rural trips to job training/education programs
- Continue the ride-to-work programs provided by Citibus

Proposed NF projects:

- Development of a place-to-wait program, including accessible taxis
- Development of regional mobility manager position

The group will continue to meet periodically, and will revise the coordination plan as necessary.

## Citibus Fleet

Citibus operates a fleet of 65 buses, four trolleys, and 28 paratransit vans. All revenue vehicles are wheelchair accessible. Citibus operates various support vehicles, including four supervisors' vans that are wheelchair accessible.

## Citibus' Services

Citibus' fixed route service runs Monday-Saturday, from approximately 5:45 a.m. to 7:45 p.m. During the week, the routes run on thirty-minute headways during morning and afternoon peaks, and hourly during mid-day; Saturday service is hourly all day. The base fare for the fixed route service is \$1. An all-day pass, which offers unlimited trips, is \$2. Citibus offers discounted fares for children and elderly. Passengers who are ADA-qualified for the paratransit service may ride the fixed routes free of charge. In addition, a variety of passes are offered, from a \$10 weekly pass, to monthly passes, and semester-long passes for students, including university students. Two routes, which serve areas of high numbers of entry-level jobs, are funded through Jobs Access Reverse Commute funds.

CitiAccess, Citibus' paratransit service, operates the same days and hours as the fixed routes. Base fares on CitiAccess are \$2 per trip, with a separate fare structure for specific destinations that are outside of Citibus' service area. CitiAccess passengers are required to meet ADA guidelines and must complete an assessment prior to becoming certified for the service. Citibus' NiteRide service is a shared-ride service that utilizes CitiAccess vehicles. NiteRide provides shared-ride trips from approximately 6:30 to 10:30 pm. NiteRide fares are \$4 and trips must be scheduled in advance; this service is currently funded through Jobs Access Reverse Commute funds.

Citibus operates service for Texas Tech University, including routes both on- and off-campus. This service is funded through a dedicated student transportation fee; no additional fares are required to ride the service and it is open to the general public. At the current time, the Texas Tech service includes four routes that operate on campus and four that serve off-campus housing areas; an additional service is a late-night on-demand service that operates until 3:00 a.m. Citibus staff works with the Student Government Association to design the route service. Texas Tech students who have a current ID can ride any of the fixed routes at no charge.

Citibus provides game-day shuttles for Tech football games and men's and women's basketball games. These buses are funding in varying ways, including sponsorships, fares, and by Texas Tech.

Finally, Citibus operates limited charter, or special, service. Under Federal guidelines and a formal agreement with the local private bus company, the only special services that Citibus provides are those that the other bus company cannot do. The numbers of passengers carried by this part of Citibus' service varies widely from year to year.

## Citibus Service Characteristics

Citibus' service operates (except Texas Tech service) operates Monday through Saturday. Tech service operates Monday through Friday when Tech is in session.

	2004	2005	2006	% Change 2004-2005	% Change 2005-2006
<b>Passengers</b>					
Fixed Route	689,440	783,560	887,422	13.65%	13.26%
CitiAccess	72,829	73,357	81,755	0.72%	11.45%
Texas Tech	2,992,911	2,701,632	2,460,095	-6.39%	-12.19%
Special	95,947	127,496	146,194	32.88%	14.67%
<b>Total</b>	<b>3,851,127</b>	<b>3,786,045</b>	<b>3,575,466</b>	<b>-1.69%</b>	<b>-5.56%</b>
<b>Miles</b>					
Fixed Route	1,037,983	983,913	983,493	-5.21%	-0.04%



*Lubbock Metropolitan Transportation Plan Fiscal Year 2007-2032*

CitiAccess	500,522	494,833	456,766	-1.14%	-7.69%
Texas Tech	498,721	527,612	484,243	5.79%	-8.22%
Special	51,062	54,808	54,862	1.38%	0.10%
<b>Total</b>	<b>2,091,289</b>	<b>2,061,166</b>	<b>1,979,364</b>	<b>-1.44%</b>	<b>-3.97%</b>

**Hours**

Fixed Route	66,201	58,938	60,219	-10.97%	2.17%
CitiAccess	32,979	36,326	35,101	10.15%	-3.37%
Texas Tech	48,299	49,482	43,952	2.45%	-11.18%
Special	9,202	9,673	8,107	5.11%	-16.19%
<b>Total</b>	<b>156,683</b>	<b>154,418</b>	<b>147,379</b>	<b>-1.45%</b>	<b>-4.56%</b>

**Passengers/Hour**

Fixed Route	10.41	13.29	14.74	27.66%	10.85%
CitiAccess	2.21	2.025	2.33	-8.55%	15.34%
Texas Tech	61.97	56.62	55.97	-8.63%	-1.14%
Special	10.43	13.18	18.03	26.42%	36.81%
<b>Total</b>	<b>24.58</b>	<b>24.52</b>	<b>24.26</b>	<b>-0.25%</b>	<b>-1.05%</b>

Citibus operates the Downtown Transfer Plaza, where a majority of transfers to other routes are made. This facility, which occupies an entire block, spaces for twelve buses to park and a facility where passengers can wait, purchase tickets or passes, etc. Additionally, Citibus passengers can make transfers at the South Plains Mall, the South Loop 289 WalMart, or at any intersection where routes meet.

Citibus is in the process of installing new bus stop signs throughout the system and will soon implement a program of providing route information at each bus stop. New shelters have been installed using funding from the Federal Community Development Block Grant program.

**Fixed Route Review**

During FY2007, Citibus planning staff will undertake a comprehensive route evaluation, which will include boarding and alighting surveys, marketing surveys, focus groups, and other processes designed to gain insight into consumer opinions of the service. The final plan will include a design for four levels of service, including a point-to-point, or grid plan.

**Citibus' Funding Concerns**

Citibus has faced budget crises for the past several years. Due to Federal regulations that prohibit urbanized areas with populations in excess of 200,000 from using their Federal funds for operating assistance, Citibus is faced with funding shortages. The City of Lubbock has been able to provide some additional funding assistance, but the current funding levels still do not permit Citibus to plan or implement additional service. As a result, newly developed areas of the city do not have transit service.

Citibus continues to seek remedies to this problem, on both state and Federal levels.

**Citibus' Safety, Security, and Emergency Preparedness Plan**

Citibus has had an adopted Safety, Security, and Emergency Preparedness Plan since 2005. The plan includes a description of the transit system; a description of the management of the security plan, including specific roles and responsibilities; threat and vulnerability identifications and assessments; and an annual program of work. The plan is updated annually.

Additionally, Citibus has produced an employee handbook that was designed to be used by all employees, not just those with direct safety- or security-related job duties. The handbook included information on security incident reporting, general security policies and procedures, personal safety and security tips, and victim response information. In addition, it included examples of forms that would be

required in the event of an incident: security incident form, lost and found report form, and complaint form.

Citibus also produced in-bus signage to educate passengers on the importance of reporting any type of suspicious packages or activities.

### **Intercity Bus**

One bus line provides intercity passenger and freight services in Lubbock. It is: The Texas New Mexico and Oklahoma Bus Company (TNM&O) located at 1313 13<sup>th</sup> Street, Lubbock, Texas.

The line provides passenger services in Texas. TNM&O provides passenger and freight service, 24 hours a day, and seven days a week. The TNM&O line has service in Texas, New Mexico, and Oklahoma. Connections can be made with other major bus lines along their service routes.

## Chapter 7 – Bicycle and Pedestrian Plan

### Bicycle Facilities

There are many people who would enjoy riding to school and work, but find it prohibitive because of perceived safety problems, lack of bicycle facilities, large distances, and lack of bicycle parking. Typically there are three categories of cyclists: advanced, basic and children. The advanced cyclist prefers direct access, the ability to travel at maximum speeds with minimum delays, and is comfortable sharing roadways with motor vehicles if given sufficient operating room. The basic cyclist is the casual cyclist, preferring a separation from motor vehicles. They typically do not reach high speeds and are comfortable with indirect access to their destinations. Often these cyclists are junior high and high school students and touring cyclists. Children require greater attention of the motor vehicle driver. Children can share streets with low motor vehicle speed limits and volumes, but need defined separation from motor vehicles for safety reasons. Children typically use bicycles to ride to school, local parks, and activities within their neighborhoods. In Lubbock there are four cycling groups who have been active in cycling concerns.

In the early 1990's the LMPO contracted with the Bicycle Federation of America (BFA) to develop a Comprehensive Bicycle Study for the area. This study was completed in 1995. The study promotes the safe use of bicycles as an alternative mode of transportation. The BFA identified users, where they ride, and where they ride. They analyzed and proposed street networks to determine routes best for bicycles. BFA identified possible projects and provided cost estimates and funding sources for those projects.



was  
bicycles  
defined  
existing  
suited

In August of 1995 the Transportation Policy Committee adopted the Comprehensive Bicycle Study as a starting and planning tool to aid in development of bicycle routes in the community. In 1998 the Comprehensive Bicycle Study was used as a planning guide in the revision of the LMPO Thoroughfare Plan. Incorporated into the Thoroughfare Plan was additional lane width on major arterials, when appropriate and funded, to accommodate cycling needs. Please see Map 7 – 1.

point

An enhancement funding program was awarded to the City of Lubbock for the enhancement and improvement of proposed bicycle routes. This program has allowed the City of Lubbock to develop a number of routes, providing signage along the routes and pedestrian buttons to enhance safety at street crossings. Cycling group representatives have been encouraged to submit applications for future enhancement program funding as the funding becomes available. The current Bicycle Plan is under review and is scheduled for updating no later than September 2007.

### Pedestrian Facilities

Pedestrian facilities in the Lubbock Metropolitan Area vary from the use of sidewalks to the one pedestrian overpass, which spans Interstate 27 at 54th Street. Additional bicycle and pedestrian overpasses are included in plans for the Marsha Sharp Freeway near the Texas Tech University area. Walking and jogging has, for the most part, been for recreational purposes rather than for transportation. This is visible in those areas which pedestrians are more prevalent such as in residential neighborhoods, commercial areas, near schools, and at parks.

There are methods for managing pedestrian traffic for the purposes of transportation. One method would be to have pedestrians co-exist with vehicles, bicycles, or other modes of transportation. However, co-existence with another form of transportation would not be preferred because it is simply not safe for those afoot. A second method would be to provide separate pathways for pedestrians. This method would provide excellent access and would be the safest, to the extent possible, but would not be a cost effective transportation alternative. Therefore, a compromise must be made. A safe, reliable, accessible, and cost

effective measure must be used in providing pedestrian transportation.

Sidewalks can and do provide for pedestrian traffic in the Lubbock Metropolitan Area. Placing sidewalks along local streets, collectors and arterials supplies good access for those pedestrians traveling in residential and commercial areas. Pedestrians also have access to many of the bridges within the area and will have access to all intersections along the proposed Marsha Sharp Freeway. The Americans with Disabilities Act of 1990 requires all sidewalks constructed after the signing of the bill provide accessible curb ramps for the disabled. This is also taken into consideration when constructing sidewalks.

The City of Lubbock and the City of Wolfforth require, by ordinance, that sidewalks be included in all building permits. Ordinance number 9580, as approved by the Lubbock City Council on January 14, 1993, is the latest revision to Subsection 24-48 of the Code of Ordinances requiring sidewalk construction. Subsection 24-48 reads as follows:

*“Whenever application is made to the Building Official by any person for a building permit to make any construction, addition or structural alteration on a building or other structure, or to pave a parking lot where a permit is required by this Code or any other Ordinance of the City on property adjacent to or abutting on a public street, where the existing sidewalks, driveways either private or commercial, curbs, curb ramps, street curbs and gutters abutting such property do not conform to the basic standards, specifications, layout, details and designs provided for and established by this article, or in the event when all sidewalks, driveways either private or commercial, curbs, curb ramps, street curbs and gutters, required to be constructed have not been constructed, no permit shall be issued by the Building Official until applicant for such permit shall agree in writing to construct, reconstruct or repair, the curb, curb ramp, gutter, sidewalk or driveway in accordance with this article as a part of and a condition to the issuance of such building permit. No construction, addition or alteration to such buildings or other improvements placed or constructed on the adjacent private property shall be approved by the Building Official, until such times as all the sidewalks, driveways, curbs, curb ramps, street curbs and gutters have been constructed or reconstructed and comply with the provisions of this article.”*

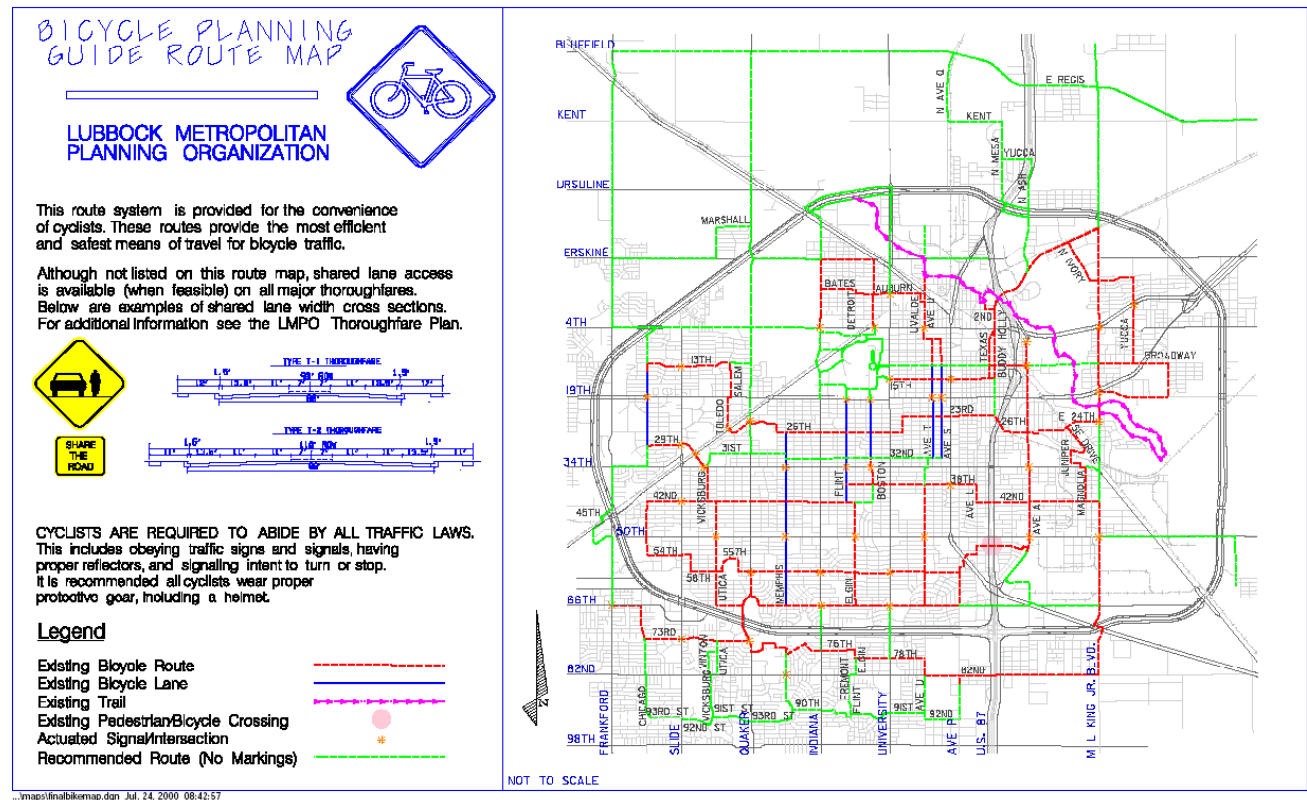
Even though the Building Board of Appeals has required sidewalks, variances have been granted. This has caused some discontinuity in pedestrian access, especially on thoroughfare routes.

A pedestrian plan is intended for the future and will include an inventory of the existing system, an estimate of costs associated with this project, and development of a construction program to complete the pedestrian network projects. The construction program will be determined from the data collected and cost estimates will be made at that time. Currently, the Streets Department maintains an inventory of the sidewalks in the City of Lubbock. This inventory includes sidewalks along streets classified as Collector and above. This is the initial information required for a pedestrian plan. The primary source of funds to complete the pedestrian system will come from Surface Transportation Program Enhancement Funds and Planning funds.

The Lubbock MPO studied the availability of sidewalks within its area during the past year and has identified those areas that have or do not have sidewalks currently. The MPO produced a map indicating whether a certain section of a block had sidewalks that extended greater than or less than fifty percent (50%) of the length of that particular block. Map 7-2 shows this information.

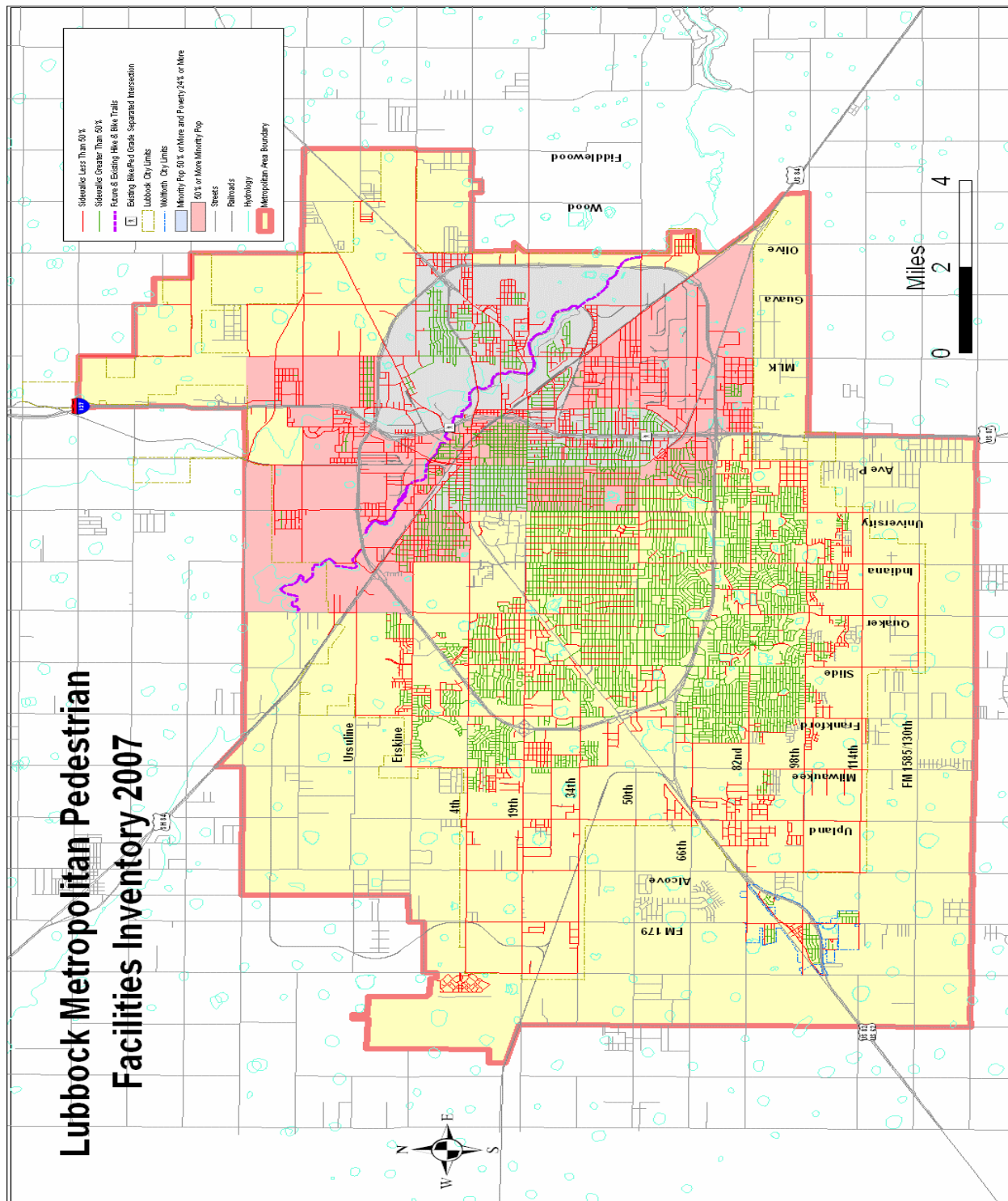
## **Bicycle and Pedestrian Plan Maps**

## Map 7- 1: Bicycle Plan Map





Map 7- 2: Sidewalk Inventory Map



Source: Lubbock Metropolitan Planning Organization

## **Chapter 8 – Lubbock Preston Smith International Airport**

### **Introduction**



One commercial airport, Lubbock Preston Smith International Airport, and one general aviation airport, Town & Country, serve the Lubbock Metropolitan Area. Lubbock Preston Smith International Airport (LBB) is the primary airport for commercial, general, and cargo aviation services. Lubbock Preston Smith International Airport is an economic driver in a regional economy that includes Lubbock and a 26 county trade area in excess of 500,000 residents. Three airlines currently serve Lubbock with an all jet fleet. American Eagle and Continental Express provide daily service to Dallas/Ft. Worth and Houston while Southwest

Airlines flies daily non-stops to Dallas, El Paso, Albuquerque, Austin, and Las Vegas with thru service to 18 additional destinations. In 2006, the three airlines accommodated 1,132,272 total passengers. The airport is a freight-forwarding hub as well. In 2006, the airport transferred more than 27,500 tons of freight and mail. Over the last several years the airport has completed several capital improvement projects on the airfield and on the landside to improve the safety and efficiency of operations. Those include new taxiways, runway shoulder improvements, terminal building upgrades and re-surfacing the passenger parking lots and upgrading the parking revenue control system. A new Master Plan has also just been completed which provides a strategic plan for continued growth at the airport.

The airport completed a twenty-year Airport Master Plan in 2007. It forecasts the airport needs through the year 2024. The plan provides a long-term physical development program to insure a safe, reliable, and efficient aviation transportation facility that is environmentally compatible with the community and protects the adjacent public and private investment in land and facilities.

The airport also recently completed a long-term plan referred to as the Interport Trade Center development plan. The intent of this plan is to “evaluate and effectively respond to the immediate and potential development demands in the vicinity of the airport.” This plan focused on land use and the necessity for the airport to continue to realize and increase revenue from existing real estate.

### **Goals and Objectives**

Six goals are set out in the plan to help direct the Master Plan initiative and establish continuity for future capital projects. These goals are:

- Provide effective direction for the future development of Lubbock Preston Smith International Airport through preparation of a rational, reasonable, and implementable plan.

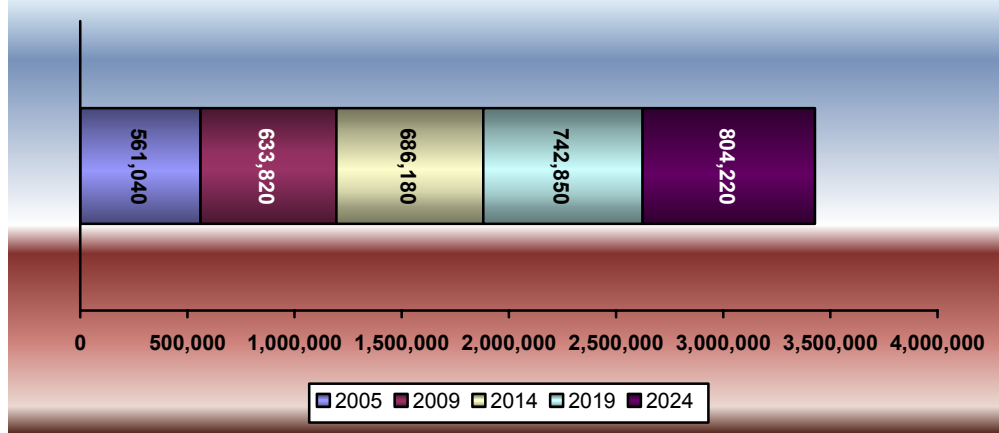
The Lubbock Preston Smith International Airport Board is committed to the development of a safe, reliable, and high quality facility. The Master Plan for the Airport incorporates this vision into a long-term physical development program.

- Accommodate the aviation forecasts in a safe and efficient manner by providing proper facilities and services.
- Maximize the landside development areas at Lubbock Preston Smith International Airport.
- Encourage the protection of existing public and private investment in land and facilities.
- Plan and develop the Airport to be environmentally compatible with the community, and minimize environmental impacts to both airport property and non-airport property potentially affected by airport operations.

To summarize the six goals presented in the Master Plan, one could say the plan was written to provide continuity for future airport development by providing effective direction through a rational, reasonable, and implementable plan.

Lubbock Preston Smith International Airport is currently being served by the American Eagle, Continental Express and Southwest Airlines. Expected enplanements by the 2024 are shown in Table 8-1.

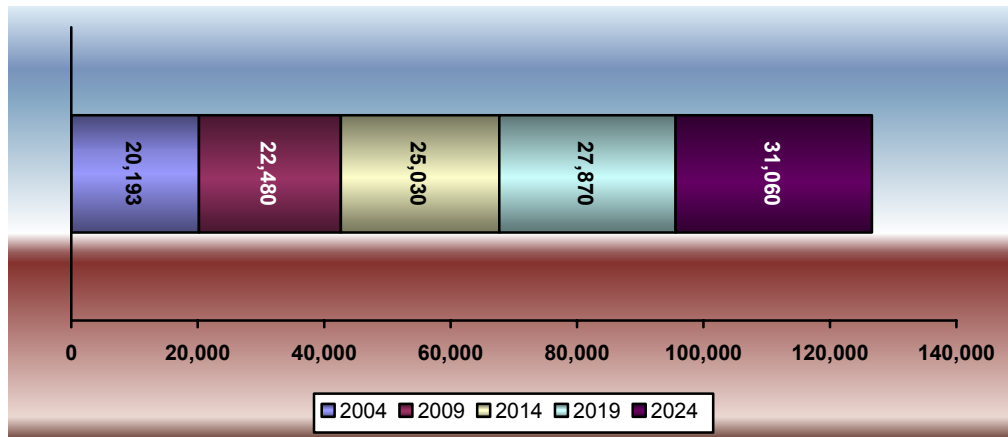
**Table 8-1: LBB Airline Enplanement Projections**



Source: Lubbock International Airport

Lubbock International Airport also serves as the center for cargo shipments for the entire West Texas region. In recent years major cargo facilities were built to support both FedEx and DHL World Wide. The growth of air cargo activity has been tremendous and can be reviewed in Table 8-3.

**Table 8-3: Air Cargo Activity Forecast 2004 – 2024 in Tons**



Lubbock International

Source:

In concert with the goals are the capital projects that are proposed in the implementation plans that cover the entire planning period to 2024. The first 5-year plan is presented below while the 6 to 11 year plan and 11 to 20 year plan are not presented because they are dynamic and will change with changing priorities.

## Development Plan

### Phase One (0-5 Years)

#### Year 1 (FY 2006)

- A.1 East Side Phase II GA Ramp Improvements - Design
- A.2 Replace Airport Signage

**Year 2 (FY 2007)**

- A.3 East Side Phase II GA Ramp Improvements - Construction
- A.4. Terminal Building Improvements, ADA Compliance, and Carpet Replacement
- A.5 Roadway and Signage Improvements
- A.6 Upgrade Flight Information Displays
- A.7 Airfield Pavement Analysis
- A.8 Purchase ARFF Vehicle
- A.9 Runway 08/26 Extension Environmental Assessment

**Year 3 (FY 2008)**

- A.10 Bridge 72- Inch Water Line, Rehabilitate and Extend Runway 08/26, Extend Taxiway J, Demo Runway 26 End, and Reconstruct Taxiway R - Design
- A.11 Airfield Drainage and Bird Mitigation Improvements
- A.12 Remove and Reseal all Joints in Concrete Pavement

**Year 4 (FY 2009)**

- A.12 Bridge 72-Inch Water Line Under Runway 08/26 Extension Construction

**Year 5 (FY 2010)**

- A.13 Rehabilitate Runway 17R/35L, Design
- A.14 Extend Runway 08/26 and Taxiway J – Construction

**Other Potential Phase I Projects**

- A.15 Relocate RTR Antennas
- A.16 Implement ILS or Precision GPS Approach to Runway 35L, Including Installation of MALSR

## **Chapter 9 – Railroads and Trucking**

### **Railroads**

Two railroads currently serve the Lubbock area. The Burlington Northern, Santa Fe Railway (BNSF) (formerly the Atchison, Topeka and Santa Fe Railway), and the West Texas & Lubbock Railway (formerly the Seagraves, Whiteface and Lubbock Railway) operate lines that pass through or terminate in Lubbock. An application was submitted to the Interstate Commerce Commission requesting a merger of the Atchison, Topeka and Santa Fe Railway with the Burlington Northern Railway. The application was approved, and the railway has been renamed to the Burlington Santa Fe Railway. The completion of this merger has brought better railway transportation into the Lubbock area. Burlington, Santa Fe is considered a Class I railroad as defined by the Interstate Commerce Commission to be a railroad that exceeds \$96.1 million or more in operating revenues. The Burlington, Santa Fe Railway controls four lines which run along U.S. 84 both Northwest and Southeast, along I.H. 27 to the North, and to the Northeast along U.S. 62/82. The Burlington, Santa Fe Railway currently operates 14 trains per day through the Lubbock area. Of the total cargo carried by the railroad company, approximately 30 percent of it is hazardous material.



The West Texas and Lubbock Railway currently operates two rail lines. One line follows U.S. 62/82 to the Southwest and the other follows S.H. 114 to the West. The railroad operates two trains per day with the termini being either the communities of Seagraves or Whiteface. Of the 5,000 tons of cargo carried per day, approximately 20 percent is considered to be hazardous materials.

A portion of the West Texas and Lubbock Railway has been relocated as part of the Marsha Sharp Freeway project. The portion of the rail line that runs adjacent to U.S. 62/82 from just Southwest of Loop 289 to U.S. 84 was relocated to the West between F.M. 179 and the area that was formerly Reese Air Force Base, now known as Reese Center. This relocation of a railroad line has reduced the number of crossings within the City of Lubbock.

### **Reese International Transload Terminal**

A Transload Terminal is planned at the old, deactivated Reese Air Force Base now known as the Reese Technology Center. The terminal will utilize the base's two 10,500 feet X 150 feet concrete runways as the core of the container handling facility. The runways will be supported with 600 acres of surrounding land and 39,000 feet of railroad track, all designed for efficient container handling of rail to truck and truck to rail. This state-of-the-art railroad transload terminal will allow the rapid, cost-effective loading and unloading of containers (empty and loaded) being received and shipped by West Texas businesses. Container destinations can be either domestic or international. The terminal is designed to handle 70,000 containers annually on a two-shift basis, with expansion handled by the use of a third shift and weekends. The facility will be open to all shippers and businesses on an "as needed" basis. The terminal will be served by the BNSF Railway and West Texas and Lubbock Shortline Railroad.

Currently the region has one small container yard with a capacity to handle 10,000 – 11,000 containers of cotton per year. The Lubbock region ships between 12,000 and 15,000 loaded cotton containers to Dallas on 18-wheel trucks; these containers are then loaded onto unit trains and shipped to the West Coast, frequently passing through Lubbock again. The TransLoad facility will allow these containers to be placed on unit trains and shipped directly to the West Coast. Each 40 foot container holds eighty-eight 500 pound bales of cotton.

The benefits that will be received to the region and users are very broad – greatly reduced costs, improved logistics, reduced highway congestion and pollution, jobs, regional capital investment and the utilization of idle capital facilities.

## **Trucking**

Railroads and trucking are efficient modes of transportation for freight and bulk cargo and are an integral part of developing economic opportunities. Because of their size and scale, rail, truck, and multimodal freight facilities need planning to minimize conflict with other modes of transportation and to foster safety and efficiency.

In January 2006 the MPO held the first of several planned regional freight planning forums to discuss freight transportation in the South Plains region of West Texas. The MPO reached out to private freight operators through their local associations, and individual contact to make sure they were included as part of the interagency consultation process, and projects specific to the needs of the freight community and related to intermodal freight programs and projects are a part of the long-range transportation plan and TIP.

Some of the goals of the MPO are to provide for a safe and efficient movement of trucks in the metropolitan area, engage trucking companies and other stakeholders in regional coordination and planning efforts and identify and enhance routes and corridors that would provide connectivity for trucks particularly as it relates to the Ports to Plains and La Entrada al Pacifico Corridors.

Some policies that could be used to accomplish the above goals are:

Locate compatible land uses along major streets to encourage trucks to confine their travel to arterials, expressways, and freeways.

Control of truck traffic can be exercised through zoning and subdivision regulations. Given proper land use and subdivision design, most trucks will tend to use the major arterial system. Bridge clearance and roadways that are not designed for trucks contribute to congestion and safety concerns. Designation of a corridor as a “freight route” or “important for freight” can help focus the identification of mobility projects that would eliminate the barriers to safe, reliable, and efficient movement of goods such as wider lanes, lane widths needed for increased turning radius, and design standards that would accommodate heavy loads.

Discourage truck travel through residential neighborhoods.

Prohibit truck through traffic on all local and collector streets with residential zoning to eliminate noise and danger, and reduce street maintenance costs. Provide signage that alerts trucks to low clearances, overhanging trees and children at play to discourage regular use.

Provide adequate off-street loading spaces for businesses which receive or distribute goods by truck.

Delivery trucks should be prevented from blocking the flow of vehicular traffic. Businesses should provide off-street loading spaces. Development of local commercial use policies that provide design standards for proper loading zones, adequate off-street parking and easy access for delivery vehicles as well as emergency service vehicles.

## **Freight Studies**

The Lubbock MPO has been a participant in various freight studies recently. The Lubbock MPO led the effort to study the needs for future movements of goods via railroads and trucks. About two years ago the LMPO hosted an initial meeting of stakeholders from Panhandle and South Plains regions of the state. Participants included representatives from three TxDOT Districts – Lubbock, Odessa, and Amarillo. The result of these meetings was a coordinated and cooperative West Texas Freight Rail Study headed by TxDOT. The study will analyze the need and feasibility of additional freight movement options in the study area.



TxDOT also conducted the *Trans-Texas Corridor Rural Development Opportunities: Ports-to-Plains Case Study*. The purpose of this study was to identify:

Opportunities for developing Trans-Texas Corridor (TTC) infrastructure in the Ports-to-Plains Corridor.

Financial and institutional actions necessary to lead to construction and continued maintenance of new infrastructure in the Ports-to-Plains Corridor.

What types of development/financing opportunities exist for other rural Texas corridors and what is the framework for analyzing feasibility?

The report was completed in April 2007 and can be found on TxDOT's website [www.dot.state.tx.us](http://www.dot.state.tx.us).

The MPO is also a member of the Lubbock Chamber of Commerce and has a representative on its transportation committee. The MPO has been working with this committee on recommendation for realignment of various tracks within the area to better facilitate freight movement and hopefully, induce more multimodal and Intermodal facilities to locate to the Lubbock region.

## **Chapter 10 – Congestion Management Process**

### **Introduction**

Traffic congestion is a continuing nationwide problem and a growing concern for local transportation officials. Sixty percent of Texans today live in a major metropolitan area. The Lubbock Metropolitan Planning Organization (MPO) has seen an increase in congestion within the Congestion Management Process Boundary (CMPB), see appendix A. Much of this congestion can be attributed to a rise in the general population, the build up of housing and businesses to the west, south, and southwest areas of the Metropolitan Area, several major highway construction projects, and an increased student population at Texas Tech University. A total of 25,829 students enrolled this year, and the forecast are for student enrollment to grow to 40,000 in the next 10 years. Traffic volume data show an over capacity on many major arterials in Lubbock during peak times. The Congestion Management Process Boundary for the Lubbock Metropolitan Planning Organization is the same as the Metropolitan Area Boundary.

Within the Lubbock Metropolitan Planning Organization's Congestion Management Process Boundary congestion is defined as those facilities, federally functionally classified as arterial and above, that have a rating of Moderate, Heavy, Severe or Extreme.

### **Purpose**

The MPO views congestion management in the context of the overall transportation planning process. The Metropolitan Planning Rule of the Statewide Planning identifies "the need to relieve congestion and prevent congestion from occurring where it does not yet occur." Further, the rule specifies that in the Transportation Management Areas (TMAs), the planning process must include the development of a Congestion Management Process (CMP) that provides for effective management of new and existing transportation facilities through the use of travel demand reduction and operational management strategies.

The Management and Monitoring System Rule of the Congestion Management Process defines congestion as "the level at which transportation system performance is no longer acceptable due to traffic interference." The rule states that in all TMAs, the CMP shall be developed, established, and implemented as part of the metropolitan planning process and shall include:

1. Methods to monitor and evaluate the performance of the multimodal transportation system; identify the causes of congestion, identify and evaluate alternative actions, provide information supporting the implementation of actions, and evaluate the efficiency and effectiveness of implemented actions;
2. Definition of parameters for measuring the extent of congestion and for supporting the evaluation of the effectiveness of congestion reduction and mobility enhancement strategies for the movement of people and goods. Since levels of acceptable system performance may vary among local communities, performance measures and service thresholds should be tailored to the specific needs of the area and established cooperatively by the State affected MPO(s), and local officials in consultation with the operators of major modes of transportation in the coverage area;
3. Establishment of a program for data collection and system performance monitoring to define the extent and duration of congestion, to help determine the causes of congestion, and to evaluate the efficiency and effectiveness of implemented actions. To the extent possible, existing data sources should be used, as well as appropriate application of the real time system performance monitoring capabilities available through the Intelligent Transportation System (ITS) technologies;
4. Identification and evaluation of the anticipated performance and expected benefits of appropriate traditional and nontraditional congestion management strategies that will contribute to the more efficient use of existing and future transportation systems based on the established performance measures. The following categories of strategies, or combinations of strategies, should be appropriately considered for each area: Transportation demand management measures, including growth management and congestion pricing; traffic operational improvements; public transportation improvements; ITS technologies; and, where necessary, additional system capacity.

5. Identification of an implementation schedule, implementation responsibilities, and possible funding sources for each strategy (or combination of strategies) proposed for implementation; and

6. Implementation of a process for periodic assessment of the efficiency and effectiveness of implemented strategies, in terms of the area's established performance measures. The results of this evaluation shall be provided to decision makers to provide guidance on selection of effective strategies for future implementation.

The Texas Metropolitan Mobility Plan will also identify common goals during development to improve traffic flow by using all modes of transportation. A regional plan will be setup tailored to the needs of the CMPB and will address the following common goals:

1. **Relieve Congestion.** The Texas Department of Transportation (TxDOT) will adopt a Texas congestion index to aid the metropolitan areas in setting goals for congestion reduction. This index will assess the mobility of people and goods in each metropolitan area of Texas. Focusing on surface modes of transportation, the index will be based on the delay time experienced by people and in the delivery of goods. Consultations with TxDOT will develop improvement goals based on that congestion index. This goal setting will require a comprehensive local and regional examination of the impact of potential improvement projects and policy approaches across all transportation modes based on index results.

2. **Improved Safety.** The regional mobility plan will address safety improvements across all transportation modes.

3. **Improved Air Quality.** Through established procedures and future refinements, the regional mobility plan will, in conformance with established guidelines, assess impact on air quality. This will require comprehensive planning through the metropolitan area across all modes.

4. **Improved Quality of Life.** The regional mobility plan will address the quality-of-life impact of proposed projects and approaches. This quality-of-life assessment, integral to regional plan approval, will serve with the air-quality assessment as a basis for improved methods of project implementation.

5. **Improved Opportunities for Economic Development.** Reduced congestion and improved mobility are crucial to the economic vitality of the Lubbock Congestion Management System Boundary. Further growth must be well planned and comprehensively integrated with all transportation modes.

### **Congestion Management Process Work Program (CPSWP)**

Pursuant to the Management and Monitoring Systems Final Rule issued on December 19, 1996, the MPO has established the Congestion Management Committee (CMC) comprising of all the members of the Technical Advisory Committee plus the MPO staff. The CMC is the committee responsible for preparing and making recommendations to the Transportation Policy Committee for implementing the Congestion Management Process Program. The MPO staff assists this committee. Collective and individual responsibilities of the members of this committee are listed in the Congestion Management Process document.

In September 2003, the MPO designated the Transportation Policy Committee (TPC) as the Regional Planning Board for the Texas Metropolitan Mobility Plan. The critical analysis of thoroughfares in the CMSB relative to their level of congestion based on traffic volumes (ADT) per lanes.

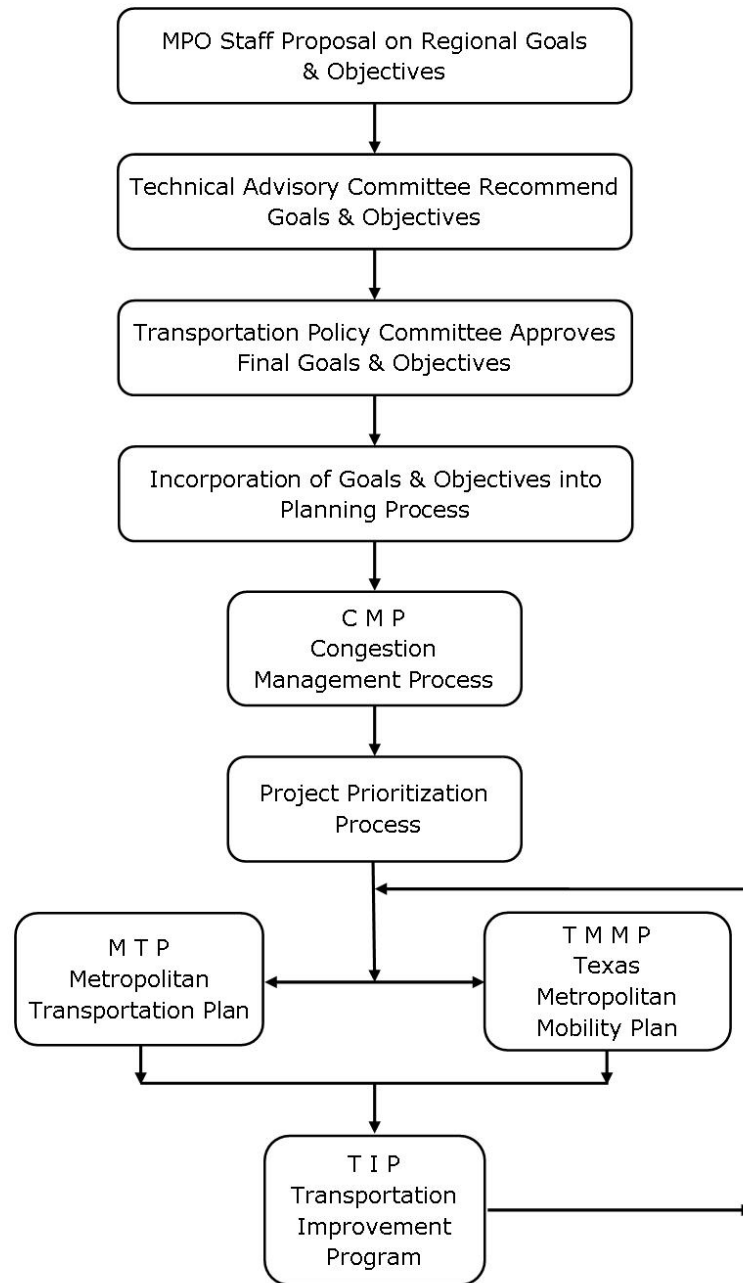
The Lubbock Metropolitan Planning Organization's Congestion Management Committee shall monitor the congestion in the Lubbock Congestion Management Process Boundary and make necessary recommendations to the Transportation Policy Committee.

The primary means of addressing congestion within the Lubbock Congestion Management Process Boundary will be through Transportation System Management (TSM) strategies of Traffic Signal Synchronization, Intelligent Transportation (ITS), Intersection Improvements, Geometric Design and Access Management.

## **Congestion Management Process**

The MPO may not have the luxury of adding capacity to accommodate increased traffic. It is the intention of the MPO to work with the local entities to improve efficiency by adopting the Transportation Demand Management (TDM) and Transportation System Management (TSM) strategies to reduce Single Occupancy Vehicle (SOV) travel. Flow Chart - 1 explains the Congestion Management Process (CMP) activities of the MPO and their relationship with the planning process. During each update to the Metropolitan Transportation Plan congestion will be taken into consideration during the project selection process and will be reviewed to insure compliance with SAFETEA-LU as a CMP.

Flow Chart—1 MPO Planning Process



## **Goals**

The MPO's goals to operate the Congestion Management Process are as follows:

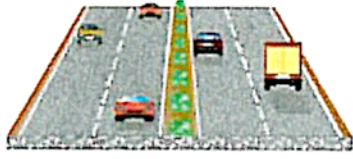

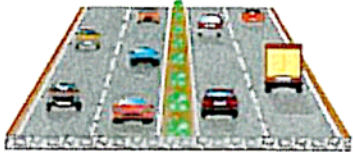



1. To provide the Congestion Management Process Boundary area community with a safe, efficient, environmental friendly, and economical transportation system.
2. To improve mobility of goods and persons by using Intelligent Transportation System (ITS) and other strategies according to local needs.
3. To reduce SOV travel by encouraging the use of other modes including transit, walking, biking, carpooling, and vanpooling.
4. To improve both intermodal and multimodal facilities by maximum utilization of existing resources.
5. To maintain Level of Service (LOS) A, B, C, or D during peak periods.
6. To utilize the Texas Metropolitan Mobility Plan process to assist in carrying out the CMP plan.

## **Level of Service**

The drawing below illustrates the LOS (Level of Service) concept. See Figure 10-1.



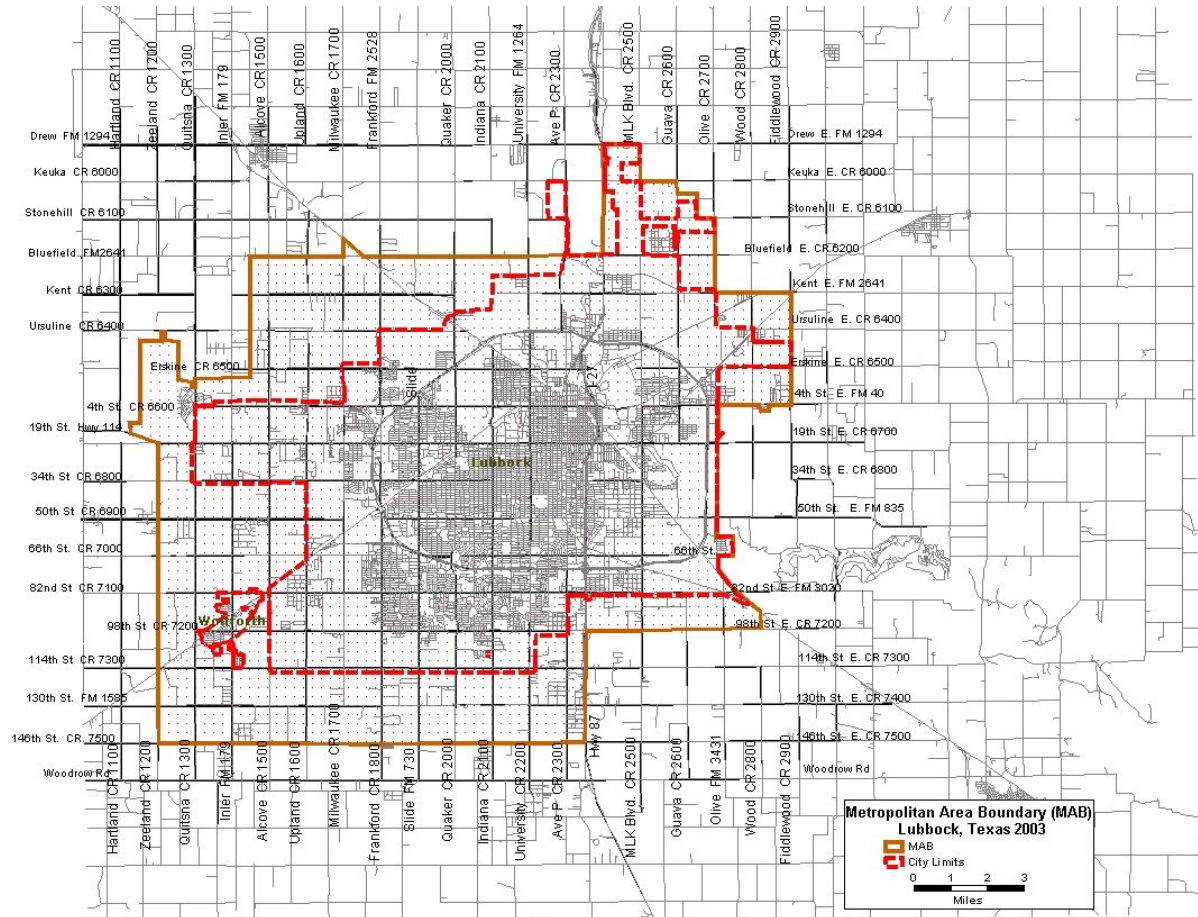
Figure 10-1: Levels of Service

Levels of Service		
Level of Service	Flow Conditions	Technical Descriptions
<b>A</b>		Highest quality of service. Traffic flows freely with little or no restrictions on speed or maneuverability. <b>No delays</b>
<b>B</b>		Traffic is stable and flows freely. The ability to maneuver in traffic is only slightly restricted. <b>No delays</b>
<b>C</b>		Few restrictions on speed. Freedom to maneuver is restricted. Drivers must be more careful making lane changes. <b>Minimal delays</b>
<b>D</b>		Speeds decline slightly and density increases. Freedom to maneuver is noticeably limited. <b>Minimal delays</b>
<b>E</b>		Vehicles are closely spaced, with little room to maneuver. Driver comfort is poor. <b>Significant delays</b>
<b>F</b>		Very congested traffic with traffic jams, especially in areas where vehicles have to merge. <b>Considerable delays</b>

Source: California Department of Transportation (Caltrans), 2003

## **Congestion Management Process Maps**

**Map 10-1 Congestion Management Process Boundary**



Source: Lubbock Metropolitan Planning Organization

## Chapter 11 – Safety and Security

### Safety

Safety is first among the four goals that the MPO utilizes in project selection and planning activities. The MPO is utilizing the Texas highway safety planning process as described in the Texas Highway Safety Performance Plan for Fiscal Year 2006 as the foundation upon which to identify the goals, strategies, performance measures, and objectives for the MTP planning process. Additionally, as can be seen in the following project ranking criteria the Lubbock MPO places great emphasis on efforts to maximize safety and mitigate congestion.

#### OBJECTIVE

##### **Maximize Safety 30 points**

Geometric Improvement	5 points
Minimize Crashes	10 points
Enhance Traffic Control	5 points
Minimize Fatalities	10 points

##### **Mitigate Congestion 30 points**

Special Generators	10 points
Level of Service	20 points

##### **Enhance System Preservation 20 points**

Surface Cracking	5 points
Potholes	5 points
Edge Deterioration	5 points
Base Failure	5 points

##### **Promote Economic Development 20 points**

Paved Roadway	5 points
Percent Adjacent Property Developed	5 points
Right of Way Required	10 points

### The FY 2006 Texas Performance Plan

A brief description of the processes used by Texas to identify its highway safety problems, establish its proposed measurable performance goals, and develop the programs/projects in the FY 2006 Texas Highway Safety Plan that are designed to address highway safety problems in Texas.

The highway safety goals established through the processes noted above include target dates for attaining the goals and the performance measures used to track progress toward each goal relative to the baseline status of each measure. In addition, the Performance Plan lists other program goals for each of the Texas Traffic Safety Program's Program Areas, specifies the strategies employed to accomplish the goals, and reports the status of the performance measures based on the most current data. City of Lubbock's crash (accident) data can be found at their website: <http://traffic.ci.lubbock.tx.us/Crash%20Data.htm>.

Locally the key element to implement a performance based safety plan is to better identify safety issues and trends. The City Of Lubbock's Traffic Engineering Department is working with the MPO to identify and utilize automated systems of entering, storing, and analyzing traffic incident data. The MPO and the Traffic Engineering Department also look at corridors and/or intersections in order to develop a safer

driving environment for the motoring and non-motoring public. Data regarding volumes and crashes in the City Of Lubbock is located on the City's web page. The MPO and Traffic Engineering will continue to utilize the new data tools and the template of the Texas Safety Plan to develop a locally sensitive plan to become a part of the planning process.

## **Strategic Highway Safety Plan**

Under SAFETEA-LU, there is a requirement for the MPO and TxDOT's statewide planning process to be consistent with the TxDOT's Strategic Highway Safety Plan (SHSP). Strategic Highway Safety Plan (SHSP) can be found at:

[http://www.dot.state.tx.us/publications/traffic/shsp\\_fy\\_07.pdf](http://www.dot.state.tx.us/publications/traffic/shsp_fy_07.pdf).

The statewide and metropolitan transportation plans "should" include a safety element that incorporates or summarizes the priorities, goals, countermeasures, or projects in the SHSP. The process Texas followed is in compliance with the requirements set forth in SAFETEA-LU title 23 U.S.C. §148.

The MPO fully supports the TxDOT effort in meeting SAFETEA-LU requirements by identifying the State's most critical crash categories and proposed strategies and countermeasures to reduce deaths and serious injuries. The process is ongoing and will continue and will expand the involvement of public and private safety stakeholders through the input of regional stakeholders.

## **Regional Safety Plan**

Although the MPO has incorporated safety as a critical factor in the selection of projects for the Metropolitan Transportation Plan and Transportation Improvement Program there is a need for developing a strategic approach to improving safety. As a result the development of a regional plan and an Incident Information System is actively under discussion with MPO member agencies. The development of a plan will be a priority project. The MPO intends to work with the City of Lubbock to produce a Safety Plan in the coming fiscal year.

The development of a Regional Strategic Highway Safety Plan (RSHP) is intended to provide guiding direction for all of the MPO member agencies and to better align their collective safety efforts. The real work begins with implementation. As essential as the collaborative process is in the development of the RSHP, it is critical for that collaborative process to be sustained and expanded. Attention to the RSHP should not end with the initial development phase. Following through with the implementation of those programs and strategies identified in the RSHP will make the real difference.

## **Security**

The Lubbock County Local Emergency Planning Committee has developed plans for addressing all types of emergencies and security for the personal security of the residents of Lubbock County. These plans include disasters caused by weather or other means. Designated hazardous material routes in Lubbock County were developed and approved by the Texas Department of Public Safety in 1995 and are a part of this plan. Members of the MPO's Transportation Policy Committee serve on the Emergency Planning Committee. These representatives include the Lubbock County Judge and the City of Lubbock City Manager.

Citibus has had an adopted Safety, Security, and Emergency Preparedness Plan since 2005. The plan includes a description of the transit system; a description of the management of the security plan, including specific roles and responsibilities; threat and vulnerability identifications and assessments; and an annual program of work. The plan is updated annually.

The Lubbock MPO has included a representative from the Texas Department of Public Safety, City of Lubbock's Police Department and Lubbock Preston Smith International Airport on its Transportation Advisory Committee.



## Chapter 12 - Mobility

### Introduction

The Lubbock area is well served in its mobility needs. The Lubbock MPO and its partners have developed a coordinated mobility system that includes roads and streets, public transportation, freight, bicycle, and pedestrian modes. Each of these modes is discussed in detail in earlier chapters of this plan.

### Roads and Streets

The City of Lubbock and TxDOT have synchronized signals at over 80% of the signalized intersections to improve the free flow of traffic. TxDOT and the City are currently implementing a joint Traffic Management Center (TMC) to combine both the Freeway Management and arterial traffic signal timing to respond to incidents and congestion utilizing partial federal funding. The TMC will be operated by the City of Lubbock under contract to TxDOT (starting fall of 2007) and will allow police and fire dispatch to access the new freeway monitors to better respond to incidents and reduce congestion quicker. The MPO continues to explore Access Management Improvements to minimize congestion. City of Lubbock traffic counts can be found on their website: <http://traffic.ci.lubbock.tx.us/Traffic%20Counts.htm>

Lubbock County roads and streets have been laid out on a grid system and continue to develop in square mile sections. This type of development has provided a smooth transition from the rural county roads to urban city streets. As development occurs along the perimeter of the City, the City of Lubbock's Paving Policy, adopted by resolution on April 28, 1994, requires the developer to construct paving improvements located within the new subdivision. There are several options for developers regarding the construction of thoroughfares that are adjacent to the subdivision. The thoroughfares will continue to provide a continuous link between the urban and rural areas. The MPO is aware that there are many transit needs in the city that are not being met as fully as is desirable. Citibus was forced to reduce service due to a reduction of Federal funding as well as the loss of the ability to use Federal funds for operating assistance. This has resulted in the City of Lubbock and Citibus looking at several alternatives. It is likely that a solution will be found to return Citibus to a viable transportation alternative.

### Public Transportation

Public transportation plays a vital role in promoting social and economic health in a community, as it offers affordable transportation options to the citizens of the community. Transportation services in the region are provided by three public providers, one urban and two rural.

### Freight

Two railroads currently serve the Lubbock area. The Burlington Northern and Santa Fe Railway (BNSF) (formerly the *Atchison, Topeka and Santa Fe Railway*), and the West Texas & Lubbock Railway (formerly the *Seagraves, Whiteface and Lubbock Railway*) operate lines that pass through or terminate in Lubbock. An application was submitted to the Interstate Commerce Commission requesting a merger of the Atchison, Topeka and Santa Fe Railway with the Burlington Northern Railway. The BNSF is considered a Class I railroad as defined by the Interstate Commerce Commission to be a railroad that exceeds \$96.1 million or more in operating revenues. The BNSF controls four lines which run along U.S. 84 both Northwest and Southeast, along I.H. 27 to the North, and to the Northeast along U.S. 62/82. The BNSF currently operates about 14 trains per day through the Lubbock area. Of the total cargo carried by the railroad company, approximately 30 percent of it is hazardous material. The West Texas and Lubbock Railway currently operates two rail lines. One line follows U.S. 62/82 to the Southwest and the other follows S.H. 114 to the West. The railroad operates two trains per day with the termini being either



the communities of Seagraves or Whiteface. Of the 5,000 tons of cargo carried per day, approximately 20 percent is considered to be hazardous materials.

A portion of the West Texas and Lubbock Railway has been relocated as part of the East/West Freeway project. The portion of the rail line that runs adjacent to U.S. 62/82 from just Southwest of Loop 289 to U.S. 84 was relocated to the West between F.M. 179 and the area that was formerly Reese Air Force Base, now known as Reese Center. This relocation of a railroad line has reduced the number of crossings within the City of Lubbock.

## **Bicycle**

In the early 1990's the LMPO contracted with the Bicycle Federation of America (BFA) to develop a Comprehensive Bicycle Study for the area. This study was completed in 1995. The study promotes the safe use of bicycles as an alternative mode of transportation. The BFA defined who users were, and where they ride. They analyzed existing and proposed street networks to determine routes best suited for bicycles. BFA identified possible projects and provided cost estimates and funding sources for those projects.

In August of 1995 the Transportation Policy Committee adopted the Comprehensive Bicycle Study as a starting point and planning tool to aid in development of bicycle routes in the community. In 1998 the Comprehensive Bicycle Study was used as a planning guide in the revision of the LMPO Thoroughfare Plan. Incorporated into the Thoroughfare Plan was additional lane width on major arterials, when appropriate and funded, to accommodate cycling needs.

## **Pedestrian**

Pedestrian facilities in the Lubbock Metropolitan Area vary from the use of sidewalks to the one pedestrian overpass, which spans Interstate 27 at 54th Street. Additional bicycle and pedestrian overpasses are included in plans for the Marsha Sharp Freeway near the Texas Tech University area. Walking and jogging has, for the most part, been for recreational purposes rather than for transportation. This is visible in those areas which pedestrians are more prevalent such as in residential neighborhoods, commercial areas, near schools, and at parks.

## **Operations and Management**

The MPO's Congestion Management Process plan has developed a schedule for conducting Travel Time and Delay studies and traffic counts to monitor the traffic patterns in the area. Depending on the results, the MPO's Congestion Management Subcommittee identifies the congested hot spots and presents recommendations for transportation improvements. The City of Lubbock (City) and TxDOT have synchronized signals at over 80% of the signalized intersections to improve the free flow of traffic. TxDOT and the City are currently implementing a joint Traffic Management Center (TMC) to combine both the Freeway Management and arterial traffic signal timing to respond to incidents and congestion utilizing partial federal funding. The TMC will be operated by the City of Lubbock under contract to TxDOT (starting fall of 2007) and will allow police and fire dispatch to access the new freeway monitors to better respond to incidents and reduce congestion quicker. The Lubbock area has designated Hazardous Materials Movement routes, installed cameras at intersections and will soon begin installation of Variable Message Signs and cameras on the freeway system. Citibus has had an adopted Safety, Security, and Emergency Preparedness Plan since 2005. The plan includes a description of the transit system; a description of the management of the security plan, including specific roles and responsibilities; threat and vulnerability identifications and assessments; and an annual program of work. The MPO continues to explore Access Management Improvements to minimize congestion.

Lubbock County roads and streets have been laid out on a grid system and continue to develop in square mile sections. This type of development has provided a smooth transition from the rural county roads to urban city streets. As development occurs along the perimeter of the City, the City of Lubbock's Paving Policy, adopted by resolution on April 28, 1994, requires the developer to construct paving improvements located within the new subdivision. There are several options for developers regarding the construction of

thoroughfares that are adjacent to the subdivision. The thoroughfares will continue to provide a continuous link between the urban and rural areas.

The MPO is aware that there are many transit needs in the city that are not being met as fully as is desirable. Citibus was forced to reduce service due to a reduction of Federal funding as well as the loss of the ability to use Federal funds for operating assistance. This has resulted in the City of Lubbock and Citibus looking at several alternatives. It is likely that a solution will be found to permit Citibus services to expand as the city continues to grow.

## Chapter 13 – The SAFETEA-LU Planning Factors

### Introduction

SAFETEA-LU lists eight factors that must be considered as part of the planning process for all metropolitan areas. The MPO staff and the Technical Advisory Committee consider the factors as part of the planning process before making recommendations to the Transportation Policy Committee. The MPO considers these areas in the development of the long and short range plan as listed below.

### Factors

**Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.**

Both short and long range planning process and projects support the economic vitality of the MPO area by improving transportation infrastructure. Projects such as the Marsha Sharp Freeway will enhance accessibility and safety to ensure efficient movement of people and goods. The recent completion of Milwaukee Avenue has opened a new venue for retail and housing developments as well as allowing for more efficient movement of traffic throughout the western portion of the City.

**Increase the safety of the transportation system for motorized and non-motorized users.**

The MPO is utilizing the Texas highway safety planning process as described in the *Texas Highway Safety Performance Plan for Fiscal Year 2006* as the foundation upon which to identify the goals, strategies, performance measures, and objectives for the MTP planning process.

**The FY 2006 Texas Performance Plan contains:**

A brief description of the processes used by Texas to identify its highway safety problems, establish its proposed measurable performance goals, and develop the programs/projects in the FY 2006 Texas Highway Safety Plan that are designed to address highway safety problems in Texas.

The highway safety goals established through the processes noted above include target dates for attaining the goals and the performance measures used to track progress toward each goal relative to the baseline status of each measure. In addition, the Performance Plan lists other program goals for each of the Texas Traffic Safety Program's Program Areas, specifies the strategies employed to accomplish the goals, and reports the status of the performance measures based on the most current data.

Locally the key element to implement a performance based safety plan is to better identify safety issues and trends. The City Of Lubbock's Traffic Engineering Department is working with the MPO to identify and utilize automated systems of entering, storing, and analyzing traffic incident data. The MPO and the Traffic Engineering Department also looks at corridors and/or intersections in order to develop a safer driving environment for the motoring and non-motoring public. Data regarding volumes and crashes in the City Of Lubbock is located on the City's web page. The MPO and Traffic Engineering will continue to utilize the new data tools and the template of the Texas Safety Plan to develop a locally sensitive plan to become a part of the planning process.

Under SAFETEA-LU, there is a requirement for the MPO and TxDOT's statewide planning process to be consistent with the TxDOT's Strategic Highway Safety Plan (SHSP). The statewide and metropolitan transportation plans "should" include a safety element that incorporates or summarizes the priorities, goals, countermeasures, or projects in the SHSP. The process Texas followed is in compliance with the requirements set forth in SAFETEA-LU title 23 U.S.C. §148.

The MPO fully supports the TxDOT effort in meeting SAFETEA-LU requirements by identifying the State's most critical crash categories and proposed strategies and countermeasures to reduce deaths and

serious injuries. The process is ongoing and will continue and will expand the involvement of public and private safety stakeholders through the input of regional stakeholders.

Although the MPO has incorporated safety as a critical factor in the selection of projects for the Metropolitan Transportation Plan and Transportation Improvement Program there is a need for developing a strategic approach to improving safety. As a result the development of a regional plan and an Incident Information System is actively under discussion with MPO member agencies. The development of a plan and an Incident Information System will be a priority project

The development of a Regional Strategic Highway Safety Plan (RSHP) is intended to provide guiding direction for all of the MPO member agencies and to better align their collective safety efforts. The real work begins with implementation. As essential as the collaborative process is in the development of the RSHP, it is critical for that collaborative process to be sustained and expanded. Attention to the RSHP should not end with the initial development phase. Following through with the implementation of those programs and strategies identified in the RSHP will make the real difference.

**Increase the ability of the transportation system to support homeland security and to safeguard the personal security of all motorized and non-motorized users.**

The Lubbock County Local Emergency Planning Committee has developed plans for addressing all types of emergencies and security for the personal security of the residents of Lubbock County. These plans include disasters caused by weather or other means. Designated hazardous material routes in Lubbock County were developed and approved by the Texas Department of Public Safety in 1995 and are a part of this plan.

Citibus has had an adopted Safety, Security, and Emergency Preparedness Plan since 2005. The plan includes a description of the transit system; a description of the management of the security plan, including specific roles and responsibilities; threat and vulnerability identifications and assessments; and an annual program of work. The plan is updated annually.

Members of the MPO's Transportation Policy Committee serve on the Emergency Planning Committee. These representatives include the Lubbock County Judge and the City of Lubbock City Manager.

The Lubbock MPO has included a representative from the Texas Department of Public Safety, City of Lubbock's Police Department, and Lubbock Preston Smith International Airport on its Transportation Advisory Committee.

**Increase the accessibility and mobility of people and freight.**

The MPO's Congestion Management Process plan has developed a schedule for conducting Travel Time and Delay studies and traffic counts to monitor the traffic patterns in the area. Depending on the results, the MPO's Congestion Management Subcommittee identifies the congested hot spots and presents recommendations for transportation improvements. The City of Lubbock and TxDOT have synchronized signals at over 80% of the signalized intersections to improve the free flow of traffic. TxDOT and the City are currently implementing a joint Traffic Management Center (TMC) to combine both the Freeway Management and arterial traffic signal timing to respond to incidents and congestion utilizing partial federal funding. The TMC will be operated by the City of Lubbock under contract to TxDOT (starting fall of 2007) and will allow police and fire dispatch to access the new freeway monitors to better respond to incidents and reduce congestion quicker. The MPO continues to explore Access Management Improvements to minimize congestion.

Lubbock County roads and streets have been laid out on a grid system and continue to develop in square mile sections. This type of development has provided a smooth transition from the rural county roads to urban city streets. As development occurs along the perimeter of the City, the City of Lubbock's Paving Policy, adopted by resolution on April 28, 1994, requires the developer to construct paving improvements located within the new subdivision. There are several options for developers regarding the construction of thoroughfares that are adjacent to the subdivision. The thoroughfares will continue to provide a continuous link between the urban and rural areas. The MPO is aware that there are many transit needs in the city that are not being met as fully as is desirable. Citibus was forced to reduce service due to a reduction of Federal funding as well as the loss of the ability to use Federal funds for operating

assistance. This has resulted in the City of Lubbock and Citibus looking at several alternatives. It is likely that a solution will be found to permit Citibus services to expand as the city continues to grow.

Freight mobility is also important for the MPO area and ITS projects to extend green at various high speed signalized intersections to eliminate the delima zone and improve truck freight mobility have recently been tested and are part of the MTP projects planned.

**Protect and enhance the environment, promote energy conservation, and improve quality of life and promote consistency between transportation improvements and State and local planned growth and economic development patterns.**

An effective transportation system provides the basis for activities surrounding national parks, recreation areas, and historic sites. The MPO has always promoted accessibility to these areas and will continue to look at addressing these needs through the identification of projects that will best serve these facilities. The MPO has identified and contacted the various environmental resource agencies and will provide information as necessary to include them in the planning process. The Lubbock MPO is presently in attainment for all air quality categories. If any of the MPO area is classified as non-attainment in the future, this Plan will be revised to include projects that will reduce vehicle emissions. The MPO uses Geographic Information System Tools, which may include GIS-ST, NEPAAssist (when available), developed by the Environmental Protection Agency Region 6 and other agencies, as necessary, to evaluate environmental mitigation activities within the 25-year MPO planning boundary.

**Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight.**

The following projects will enhance integration and connectivity of the transportation system:

- Completion of the Marsha Sharp Freeway from Wolfforth to Interstate 27. The freeway will create an alternate route of connectivity from East to West, decreasing traffic and congestion on Loop 289;
- The widening of Milwaukee Avenue to seven lanes from 34<sup>th</sup> Street to 92<sup>nd</sup> Street will provided North/South connectivity across West Lubbock resulting in a decrease in traffic and congestion on the West Loop 289;
- Improvements in the Northwest portion of the City of Lubbock such as the Gateway Streets projects;
- Improvements of North Loop 289 at Slide Road and Quaker Avenue;
- Improvements of FM 1730 (Slide Road) from 98<sup>th</sup> Street to FM 1585;
- Improvement of 50<sup>th</sup> Street from Slide Road to West Loop 289;
- Improvement of FM 179 from Loop 193 to Donald Preston Drive;
- *Trans-Texas Corridor Rural Development Opportunities: Ports-to-Plains Case Study*;
- West Texas Freight Rail Study by TxDOT
- Reese Transload Facility

These projects will provide better opportunities for decreasing congestion and enhancing movement of people in these areas.

**Promote efficient system management and operation.**

There are a number of projects that have taken place and will continue to take place in order to reduce the number and length of stop delays associated with vehicular traffic. Traffic light synchronization systems were implemented in order to reduce vehicle stops and delays leading to savings in fuel consumption and lost time. The implementation of the Congestion Management System will aid in energy conservation. Overall, the Master Thoroughfare Plan for the City of Lubbock will continue to co-exist with the Comprehensive Land Use Plan and policy decisions made by the City of Lubbock, the City of Wolfforth, or the MPO will affect both plans. The ideal preservation of rights-of-way for the local governing agencies is securing the right-of-way through dedication. The cities of Lubbock and Wolfforth, through the individual city's Code of Ordinances, requires the dedication of land at the time of platting. The Master Thoroughfare Plan in effect for each City, including their Extraterritorial Jurisdiction,

determines the right-of-way necessary for future transportation corridors. Lubbock County also receives their right-of-way through dedication of land. (A copy of the Code of Ordinances for the City of Wolfforth, the City of Lubbock, and Lubbock County are available from the local government jurisdictions.

The MPO supports a Congestion Management Process. In addition to the traffic volume data collected by TxDOT and the City of Lubbock, the City collects traffic volume data on approximately 190 intersections and 329 "1/2 mile" counts in the metropolitan area. The City Of Lubbock is currently working with TxDOT to develop a joint Traffic Management Center (TMC). This TMC will consist of being able to observe traffic real time and will include a Freeway Management System (FMS). The FMS will have changeable message signs and incident management cameras.

**Emphasize the preservation of the existing transportation system.**

Improvement projects to rehabilitate the existing transportation system are one of the MPO's high priorities. The existing transportation infrastructure is of utmost importance in order to continue providing a safe and reliable system. One goal of the MPO is to provide funding to continue the maintenance and operational enhancements to the existing street network. Another goal is operational improvements that will increase traffic flow and capacities. The Congestion Management Process adopted on February 10, 2004 addressed these improvements. The CMP is currently being reviewed for possible updating.



## Chapter 14 – Financial Plan

### Introduction

SAFETEA-LU combines the continuation and improvements of the previous programs with new initiatives while advancing America's economic growth and competitiveness through efficient and flexible transportation.

Under the budget rules, highways guaranteed amounts are keyed to an actual Highway Trust Fund (HTF) Highway Account receipts and can only be used to support projects eligible under the Federal Highway Administration and highway safety programs. Transit funding is guaranteed at a selected fixed amount over the SAFETEA-LU period and can be used only to support projects eligible under transit programs. Citibus, the local transit provider, has taken an active part in the development of this plan and budget.

The Texas Transportation Commission and the TxDOT use the Unified Transportation Program (UTP) as TxDOT's ten-year plan for transportation project development. Categories have been established in the UTP to reflect various programs outlined in SAFETEA-LU and State funds.

### Federal Funding Programs for Streets and Highways

TxDOT has grouped various Federal programs under the following classifications.

The **Statewide Preservation Program** (SPP) includes three program categories:

- **Category 1 – Preventive Maintenance and Rehabilitation:** Funding for preventive maintenance and rehabilitation of the existing state highway system. The rehabilitation funds may be used for rehabilitation of the Interstate Highway System main lanes, frontage roads, structures, signs, pavement markings, striping, etc.
- **Category 6 – Structures Replacement and Rehabilitation:** Funding to replace or rehabilitate eligible bridges on and off the state highway system (functionally obsolete or structurally deficient).
- **Category 8 – Safety:** Funding related projects on and off state highway system. Projects are evaluated using three years of crash data, and ranked by Safety Improvement Index.

The SPP documentation also contains information on two highway maintenance programs as well as waterway and railroad preservation projects. These programs and projects represent preservation efforts to maintain the existing transportation assets. The MPO is exploring the development of an interagency pavement management information system to better identify and manage operation and maintenance costs over the long-range with the agencies of the MPO.

The **Statewide Mobility Program** (SMP) includes the following construction program categories:

- **Category 2 – Metropolitan Area (TMA) Corridor Projects:** Funding is intended to address the mobility needs in all major metropolitan areas (greater than 200,000 population - Transportation Management Areas) throughout the state. Funds will be used to develop and improve entire corridors of independent utility, whenever possible. Projects in this category must have the concurrence and support of the Metropolitan Planning Organization.
- **Category 3 – Urban Area (Non-TMA) Corridor Projects:** Funding is intended to address the mobility needs in all Metropolitan Planning Organization areas (greater than 50,000 and less than 200,000 population non-Transportation Management Areas) throughout the state.
- **Category 4 – Statewide Connectivity Corridor Projects:** Funding is intended to address mobility and added capacity project needs on major state highway system corridors, which provide statewide connectivity between urban areas and corridors. The highway connectivity

network is composed of the: Texas Trunk System; National Highway System (NHS); and Connections from Texas Trunk System or NHS to major ports on international borders or Texas water ports.

- **Category 5 – Congestion Mitigation and Air Quality Improvement:** Funding is to address the attainment of a national ambient air quality standard in the non-attainment areas of the state which are currently Dallas, Fort Worth, Houston, Beaumont, and El Paso. Projects are for congestion mitigation and air quality improvement (CMAQ) in the non-attainment areas in the state.
- **Category 7 – Metropolitan Mobility and Rehabilitation:** Funding is to address transportation needs within the metropolitan area boundaries of Metropolitan Planning Organizations having urbanized areas with populations of 200,000 or greater. The Metropolitan Planning Organization in consultation with the districts and interested parties selects projects. This program can be used on any roadway with a functional classification greater than a local road or rural minor collector. All projects must be developed in accordance with the applicable federal and state environmental requirements. All projects must also be designed, constructed, operated, and maintained in accordance with state laws, regulations, directives, safety standards, and design and construction standards as required by SAFETEA-LU.
- **Category 9 – Transportation Enhancements:** Funding is to address projects that are above and beyond what could normally be expected in the way of enhancements to the transportation system. Projects programmed in this category must fall under one of the following general activities as outlined in SAFETEA-LU:
  1. Provision of facilities for pedestrians and bicycles.
  2. Provision of safety and educational activities for pedestrians and bicyclists.
  3. Acquisition of scenic easements and scenic or historic sites (including historic battlefields).
  4. Scenic or historic highway programs (including the provision of tourist and welcome center facilities).
  5. Landscaping and other scenic beautification.
  6. Historic preservation.
  7. Rehabilitation and operation of historic transportation buildings, structures, or facilities (including historic railroad facilities and canals).
  8. Preservation of abandoned railway corridors (including the conversion and use of the corridors for pedestrian or bicycle trails).
  9. Inventory, control, and removal of outdoor advertising.
  10. Archaeological planning and research.
  11. Environmental mitigation to address water pollution due to highway runoff; or reduce vehicle-caused wildlife mortality while maintaining habitat connectivity.
  12. Establishment of transportation museums.
- **Category 10 – Supplemental Transportation Projects:** Funding is to address projects that do not qualify for funding in other categories. Most of the programs are state funded; however, federal funds are involved in some programs as noted above. Projects in this category must have the concurrence of the Metropolitan Planning Organization if located within their area of jurisdiction.
- **Category 11 – District Discretionary:** This category is used to address projects selected at the district engineer's discretion. Most projects should be on the state highway system. However, some projects may be selected for construction off the state highway system on roadways with a functional classification greater than a local road or rural minor collector. Funds from this program should not be used for right-of-way acquisition. Projects in this category must have the

concurrence and support of the Metropolitan Planning Organization (MPO) having jurisdiction in the particular area.

- Category 12 – Strategic Priority:** The Commission has determined that money from this category will be used on an “as needed” basis for projects with specific importance to the state. These projects will generally promote economic opportunity, increase efficiency on military deployment routes or to retain military assets in response to the federal military base realignment and closure report, or maintain the ability to respond to both man-made and natural emergencies. In addition, the Commission is also committed to utilize the Category 12 funds to help communities utilize the new financing tools, like pass-through financing agreements, in order to help local communities address their transportation needs.

The SMP documentation also contains information regarding the Aviation Capital Improvement Program and the Public Transportation Program.

## Projection of Future Funding

Given that the MPO, in consultation with TxDOT and interested parties, select projects for Category 2 and 7 funding, a projection of funding in this area is of community wide concern. Category 2 provides for funding mobility and added capacity projects on major state highway system corridors, which serve the mobility needs of a Transportation Management Area (TMA). Category 7 provides for funding mobility projects within the Transportation Management Areas (Tams). Funding projections are based on a flat line basis with no adjustments for inflation during the period of the MTP. With the viability of the Highway Trust Fund in question, numerous federal rescissions of federal funds, the federal highway and transit authorization bill up for renewal during this MTP timeframe, this course of action seems the most prudent. Using a no inflation revenue projection method the following is an estimate of available funding for the planning period:

Metropolitan Transportation Plan – Financial Constraint Summary			
	State/Federal	Local	Total
Construction	\$319,550,000	\$238,168,000	\$557,718,000
Operations/Maintenance	\$46,032,525	52,713,750	\$98,733,775
Transit	\$55,207,564	\$101,432,529	\$156,640,093

Metropolitan Transportation Plan – Financial Constraint by Category				
Category	Description	Funding Source	Average	25-year Projected Available
2	Metropolitan Area	Federal State	\$3,360,000	\$84,000,000
7	Metropolitan Mobility	Federal State	\$4,422,000	\$110,550,000
11	District Discretionary	Federal State	\$5,000,000	\$125,000,000
	Operations and Maintenance	Federal State	\$1,814,301	\$46,032,525
Local Construction	City of Lubbock and Lubbock County <sup>1</sup>	Local Funds	\$9,526,720	\$238,168,000

Local Operations and Maintenance	City of Lubbock	Local Funds	\$11,460,000	\$286,500,000
Transit	Citibus	Federal State Local	\$6,265,600	\$156,640,093
<sup>1</sup> Includes City of Lubbock's Gateway Streets Funds (\$35,420,000) and Pass Through Financing (\$76,248,000) plus \$10,000,000 Lubbock County Funds				

## Basis of Estimating Construction, Preliminary Engineering, and Right-Of-Way Costs

In calculating year of expenditure cost for construction, preliminary engineering and right-of-way costs the MPO used the projected current year costs and inflated these costs by 4% per year.

Preliminary engineering and right-of-way costs were inflated assuming costs will be a year before construction. TxDOT and local entities currently control preliminary engineering and right-of-ways funds. The MPO receives no allocation of funds for programming these funds.

## Short Range and Priority Projects

The Lubbock MPO revises the short-range transportation improvement program (TIP) every two-year period. The development of the Texas Metropolitan Mobility Plan identified the transportation needs of the study area regardless of funding availability. This highlights the funding gap that exists between projected funding available during the MTP period even with new tools provided by the Texas legislature and the work that needs to be done to eliminate Level of Service F.

## Federal Funding Programs for Transit

SAFETEA-LU provides the authorization for the Federal Transit Administration (FTA) programs. The basic structure of the Federal transit programs remains essentially the same but several new programs and activities have been added and new features have been incorporated. The funding flexibility features and similar matching ratios to the highway programs have been retained. The definition of a capital project has been revised to include preventive maintenance, the provision of non-fixed route paratransit service, the leasing of equipment or facilities, safety equipment and facilities, facilities that incorporate community services such as daycare and healthcare, and transit enhancements.

**Urbanized Area Formula Grant Program, Section 5307:** For urbanized areas with population of 200,000 or more, the funding may be used only for capital projects. The definition of capital has been revised to include preventive maintenance. Also, for the larger areas, at least one percent of the funding apportioned to each area must be used for transit enhancement activities such as historic preservation, landscaping, public art, pedestrian access, bicycle access, and enhanced access for persons with disabilities. It will be the responsibility of the MPO to determine how one percent will be allocated to transit enhancement projects.

**Capital Investment Program, Section 5309:** Section 5309 funds are divided into three different categories:

- Modernization of existing rail systems;
- New and replacement buses and facilities; and
- New fixed guideway systems.

A "fixed guideway" refers to any transit service that uses exclusive or controlled rights-of-way or rails, entirely or in part. The term includes heavy rail, commuter rail, light rail, monorail, trolleybus, aerial tramway, inclined plane, cable car, automated guideway transit, ferryboats, that

portion of motor bus service operated on exclusive or controlled rights-of-way, and high-occupancy-vehicle (HOV) lanes.

**Elderly and Persons with Disabilities Program, Section 5310:** These funds provide capital assistance for transportation of elderly persons and persons with disabilities. Eligible capital expenses may include, at the option of the recipient, the acquisition of transportation services by contract, lease, or other arrangement. While the assistance is intended primarily for private nonprofit organizations, public bodies that coordinate services for the elderly and persons with disabilities, or any public body that certifies to the state there are no nonprofit organizations in the area that are readily available to carry out the service, may receive these funds. These funds may be transferred by the Governor to supplement the Urbanized Area Formula or Nonurbanized Area Formula capital funds during the last 90 days of the fiscal year.

**Job Access and Reverse Commute Program, Section 5316:** This program provides funding for the provision of transportation services designed to increase access to jobs and employment-related activities. Job Access projects are those, which transport welfare recipients and low-income individuals in urban, suburban, or rural areas to and from jobs and activities related to their employment. Reverse Commute projects provide transportation service for the general public from urban, suburban, and rural areas to suburban employment opportunities.

All projects funded under this program must be derived from an area-wide Job Access and Reverse Commute Transportation Plan and a Regional Public Transportation Coordination Plan developed through a regional approach which supports the implementation of a variety of transportation services designed to connect welfare recipients to jobs and related activities. A key element of the program is making the most efficient use of existing public, nonprofit, and private transportation service providers.

**New Freedom, Section 5317:** The New Freedom Initiative is a comprehensive plan to ensure that all Americans have the opportunity to learn and develop skills, engage in productive work, make choices about their daily lives, and participate fully in community life. The Initiative's goals are to:

- Increase access to assistive and universally designed technologies;
- Expand educational opportunities;
- Promote homeownership;
- Integrate Americans with disabilities into the workforce;
- Expand transportation options; and
- Promote full access to community life.

All projects funded under this program must be derived from an area-wide Regional Public Transportation Coordination Plan developed through a regional approach, which supports the implementation of any project.

Action to name a designated recipient for 5316 and 5317 funding took place at the January 2007 MPO Transportation Policy Committee meeting. A subsequent project call by TxDOT will require the MPO planning process to include consideration of any such project in the urbanized area. FTA Section 5316 and 5317 funds are distributed in 2 ways:

- The State gets an apportionment for rural and small urban areas and awards the funding on a statewide, competitive basis; and
- In large urban areas (including Lubbock) a designated recipient is designated by the MPO and funds are awarded competitively within the jurisdiction of the designated recipient.

## **Metropolitan Transportation Plan 2032 Projects**



MPO Project Number	TxDOT CSJ # City Proj #	Project Name	Project Limits		Description	Year of Expenditure Costs (Thousands)				Year of Construction	Construction Balance Funds (Millions)	
			From	To		Construction Costs	P.E. Costs	R-O-W Cost	Cost			
											\$557,718	
MPO 001	0905-06-046	50th Street	Loop 289	Slide Road	Widen Non Freeway (5 lanes)	\$5,200	\$0	\$5,324	\$10,524	2008	552,518	
MPO 002	0880-04-026	FM 179	Donald Preston Drive	Loop 193	Widen Non Freeway (5 lanes)	\$5,200	\$520	\$624	\$6,344	2008	547,318	
MPO 003	City 91101	Erskine Street	Frankford Avenue	Salem Avenue	Widen Non Freeway (7 lanes)	\$15,964	\$2,992	\$200	\$19,156	2008	531,354	
MPO 004	City 91102	Slide Road	Erskine Street	West Loop 289	Widen Non Freeway (7 lanes)	\$4,301	\$905	\$0	\$5,206	2008	527,053	
MPO 046	0380-15-016	Spur 327	US 62/82 Overpass	Loop 289	Convert Non Fwy to Fwy	\$17,160	\$0	\$2,059	\$19,219	2008	509,893	
MPO 014		Upland Ave	66th Street	82nd Street	Widen Non Freeway (7 lanes)	\$3,819	\$734	\$265	\$4,818	2009	506,074	
MPO 018		Quaker Ave	98th Street	114th Street	Widen Non Freeway (7 lanes)	\$4,574	\$844	\$370	\$5,788	2009	501,500	
MPO 028		Milwaukee Ave	94th Street	98th Street	Widen Non Freeway (7 lanes)	\$2,456	\$488	\$170	\$3,114	2009	499,043	
MPO 035		98th Street	University Ave	US 87	Widen Non Freeway (7 lanes)	\$7,586	\$1,626	\$1,110	\$10,322	2009	491,457	
MPO 052	0905-06-070	Various	Feasibility Study of Outer Lp	Around City of Lubbock	Feasibility Study	\$0	\$10,816	\$0	\$10,816	2009	491,457	
MPO 053	0783-02-082	Loop 289	FM1730	IH 27	Miscellaneous Construction	\$3,510	\$0	\$0	\$3,510	2009	487,947	
MPO 005	0053-01-090	US 82	US 84 (Avenue Q)	080 mi. East of IH 27	Convert Non Fwy to Fwy (Phase IV)	\$67,492	\$0	\$1,298	\$68,790	2010	420,455	
MPO 006	1344-02-019	FM 1730 (Slide Road)	200 ft. N of 98th Street	1000 ft S. of FM 1585	Widen Non Freeway (7 lanes)	\$12,374	\$1,082	\$1,406	\$14,862	2010	408,081	
MPO 007	0783-02-064/ City 91104	W. Loop 289	SW of Erskine	NE of Quaker	Widen Fwy to 6 lanes	\$23,665	\$7,810	\$250	\$31,725	2010	384,416	
MPO 013		Indiana Ave	103rd Street	114th Street	Widen Non Freeway (7 lanes)	\$1,693	\$319	\$0	\$2,012	2010	382,723	
MPO 020		114th Street	Slide Road	Indiana Avenue	Widen Non Freeway (7 lanes)	\$10,016	\$1,984	\$425	\$12,425	2010	372,708	
MPO 021		98th Street	Milwaukee Avenue	Frankford Ave	Widen Non Freeway (7 lanes)	\$5,782	\$1,271	\$800	\$7,853	2010	366,926	
MPO 031	City 91103	Slide Road	4th Street	Loop 289	Widen Non Freeway (5 lanes)	\$4,661	\$1,480	\$2,704	\$8,845	2010	362,264	
MPO 049	City 2008063	Loop 289	SW of 4th Street	SW of Erskine Street	Widen Fwy to 6 Lanes	\$42,474	\$14,286	\$216	\$56,976	2010	319,791	
MPO 050	City 2008068	4th Street	W of Loop 289	E of Loop 289	Widen Non Freeway (7 lanes)	\$10,109	\$3,208	\$270	\$13,588	2010	309,681	
MPO 008	City 91105	Slide Road	Marshall Street	US 84 (Clovis Hwy)	Widen Non Freeway	\$10,494	\$2,120	\$281	\$12,895	2011	299,188	
MPO 009	0783-02-065	W Loop 289	.2 mi S. of 4th Street	.2 mi. N. of 34th Street	Widen Fwy to 6 lanes	\$17,548	\$1,687	\$0	\$19,235	2011	281,640	
MPO 011	0380-01-078	US 62/82	2,000 ft SW of Loop 193	0.375 miles W. of Loop 289	Phase V convert to Fwy	\$60,833	\$6,083	\$7,300	\$74,216	2012	220,807	
MPO 026		Slide Road	57th Street	Loop 289	Widen Non Freeway (7 lanes)	\$842	\$175	\$351	\$1,368	2012	219,965	
MPO 022		University Ave	98th Street	114th Street	Widen Non Freeway (7 lanes)	\$6,311	\$1,186	\$219	\$7,717	2013	213,653	
MPO 024		Indiana Ave	114th Street	FM 1585	Widen Non Freeway (7 lanes)	\$5,951	\$1,145	\$304	\$7,400	2013	207,703	
MPO 027		Milwaukee Ave	98th Street	114th Street	Widen Non Freeway (7 lanes)	\$6,507	\$1,251	\$936	\$8,695	2014	201,195	
MPO 047		Frankford Ave	98th Street	114th Street	Widen Non Freeway (7 lanes)	\$7,446	\$1,432	\$936	\$9,814	2014	193,750	
MPO 033		Milwaukee Ave	4th Street	Erskine Street	Widen Non Freeway (7 lanes)	\$7,351	\$1,413	\$974	\$9,738	2015	186,399	
MPO 040		34th Street	Milwaukee Avenue	Upland	Widen Non Freeway (7 lanes)	\$8,380	\$1,612	\$1,013	\$11,005	2016	178,019	

**Citibus Financially Constrained Plan**

<b>Summary</b>	<b>FY2007</b>	<b>FY2008</b>	<b>FY2009</b>	<b>FY2010</b>	<b>FY2011</b>	<b>FY2012</b>	<b>FY2013</b>	<b>FY2014</b>	<b>FY2015</b>	<b>FY2016</b>	<b>FY2017-FY2021</b>	<b>FY2022-FY2026</b>	<b>FY2027-FY2032</b>
<b>OPERATIONS</b>													
Bus and paratransit service	\$ 9,433,000	\$ 9,810,320	\$ 10,202,733	\$ 10,610,842	\$ 11,035,276	\$ 11,476,687	\$ 11,935,754	\$ 12,413,184	\$ 12,909,712	\$ 13,426,100	\$ 75,628,894	\$ 92,014,113	\$ 137,096,072
Restore all service to 30 minute headways													
Add service to northwest Lubbock													
Add service to south Lubbock													
Add service to west Lubbock													
Add express service from Wolfforth													
Expand service hours													
Expand service to seven days per week													
Subtotal, Operations	\$ 9,433,000	\$ 9,810,320	\$ 10,202,733	\$ 10,610,842	\$ 11,035,276	\$ 11,476,687	\$ 11,935,754	\$ 12,413,184	\$ 12,909,712	\$ 13,426,100	\$ 75,628,894	\$ 92,014,113	\$ 137,096,072
<b>Federal Share</b>	\$ 2,466,320	\$ 2,827,688	\$ 2,717,743	\$ 2,877,103	\$ 3,146,381	\$ 3,272,236	\$ 3,403,125	\$ 3,539,250	\$ 3,680,821	\$ 3,828,053	\$ 21,563,330	\$ 26,235,089	\$ 39,088,869
<b>Local Share</b>	\$ 6,966,680	\$ 6,982,632	\$ 7,484,990	\$ 7,733,739	\$ 7,888,895	\$ 8,204,451	\$ 8,532,629	\$ 8,873,934	\$ 9,228,891	\$ 9,598,047	\$ 54,065,563	\$ 65,779,024	\$ 98,007,203
<b>CAPITAL</b>													
Replace buses*		\$ 3,000,000	\$ 3,120,000	\$ 3,244,800	\$ 3,374,592	\$ 3,509,576	\$ 3,649,959				\$ 19,429,572	\$ 21,733,138	\$ 7,032,400
Replace vans**		\$ 650,000	\$ 676,000	\$ 703,040	\$ 731,162	\$ 760,408	\$ 790,824	\$ 822,457	\$ 855,356	\$ 889,570	\$ 5,010,925	\$ 6,096,557	\$ 9,083,541
Safety and security enhancements	\$ 47,165	\$ 49,052	\$ 51,014	\$ 53,054	\$ 55,176	\$ 57,383	\$ 59,679	\$ 62,066	\$ 64,549	\$ 67,131	\$ 378,144	\$ 460,071	\$ 685,480
Purchase land for additional bus parking													
Passenger amenities/public art/enhancements	\$ 94,330	\$ 98,103	\$ 102,027	\$ 106,108	\$ 110,353	\$ 114,767	\$ 119,358	\$ 124,132	\$ 129,097	\$ 134,261	\$ 756,289	\$ 920,141	\$ 1,370,961
Replace bus wash facility		\$ 208,000										\$ 332,800	
Fueling facility			\$ 56,000										
Administrative office renovation/expansion													
Construct transfer facility													
Replace support vehicles		\$ 20,000				\$ 23,200				\$ 26,912	\$ 31,218	\$ 36,213	\$ 90,735
Replace shop truck									\$ 27,000			\$ 36,000	
Misc. capital items	\$ 50,000	\$ 52,000	\$ 54,080	\$ 56,243	\$ 58,493	\$ 60,833	\$ 63,266	\$ 65,797	\$ 68,428	\$ 71,166	\$ 400,874	\$ 487,725	\$ 726,683
Replace bus lift	\$ 15,000											\$ 24,000	
Replace brake lathe	\$ 10,000											\$ 16,000	
Subtotal, Capital	\$ 216,495	\$ 4,077,155	\$ 4,059,121	\$ 4,163,246	\$ 4,329,776	\$ 4,526,167	\$ 4,683,085	\$ 1,074,452	\$ 1,144,430	\$ 1,189,039	\$ 26,007,023	\$ 30,142,644	\$ 18,989,800
<b>Federal Share</b>	\$ 173,196	\$ 3,371,224	\$ 3,361,177	\$ 3,449,032	\$ 3,586,993	\$ 3,749,033	\$ 3,879,692	\$ 884,235	\$ 941,204	\$ 977,918	\$ 21,538,833	\$ 24,949,006	\$ 15,675,319
<b>Local Share</b>	\$ 43,299	\$ 705,931	\$ 697,944	\$ 714,214	\$ 742,783	\$ 777,134	\$ 803,394	\$ 190,217	\$ 203,225	\$ 211,121	\$ 4,468,190	\$ 5,193,638	\$ 3,314,482
<b>TECHNOLOGY</b>													
Update computer equipment/software	\$ 30,000	\$ 31,200	\$ 32,448	\$ 33,746	\$ 35,096	\$ 36,500	\$ 37,960	\$ 39,478	\$ 41,057	\$ 42,699	\$ 240,524	\$ 292,635	\$ 436,010
Security cameras on buses		\$ 216,000		\$ 153,600				\$ 140,000				\$ 160,000	
Replace farebox system													
Magnetic card locks			\$ 84,000										
Install NextBus technology													
Upgrade/replace phone system		\$ 50,000						\$ 62,000			\$ 76,880	\$ 95,331	\$ 118,211
Subtotal, Technology	\$ 30,000	\$ 297,200	\$ 116,448	\$ 187,346	\$ 35,096	\$ 36,500	\$ 37,960	\$ 241,478	\$ 41,057	\$ 42,699	\$ 317,404	\$ 547,966	\$ 554,221
<b>Federal Share</b>	\$ 24,000	\$ 237,760	\$ 93,158	\$ 149,877	\$ 28,077	\$ 29,200	\$ 30,368	\$ 193,182	\$ 32,846	\$ 34,159	\$ 253,924	\$ 438,373	\$ 443,377
<b>Local Share</b>	\$ 6,000	\$ 59,440	\$ 23,290	\$ 37,469	\$ 7,019	\$ 7,300	\$ 7,592	\$ 48,296	\$ 8,211	\$ 8,540	\$ 63,481	\$ 109,593	\$ 110,844
<b>Annual Total</b>	\$ 9,679,495	\$ 14,184,675	\$ 14,378,302	\$ 14,961,434	\$ 15,400,147	\$ 16,039,353	\$ 16,656,799	\$ 13,729,114	\$ 14,095,199	\$ 14,657,839	\$ 101,953,321	\$ 122,704,723	\$ 156,640,093
<b>Federal Share</b>	\$ 2,663,516	\$ 6,436,672	\$ 6,172,078	\$ 6,476,012	\$ 6,761,451	\$ 7,050,469	\$ 7,313,185	\$ 4,616,668	\$ 4,654,871	\$ 4,840,131	\$ 43,356,087	\$ 51,622,468	\$ 55,207,564
<b>Local Share</b>	\$ 7,015,979	\$ 7,748,003	\$ 8,206,224	\$ 8,485,422	\$ 8,638,697	\$ 8,988,885	\$ 9,343,614	\$ 9,112,446	\$ 9,440,328	\$ 9,817,708	\$ 58,597,234	\$ 71,082,256	\$ 101,432,529

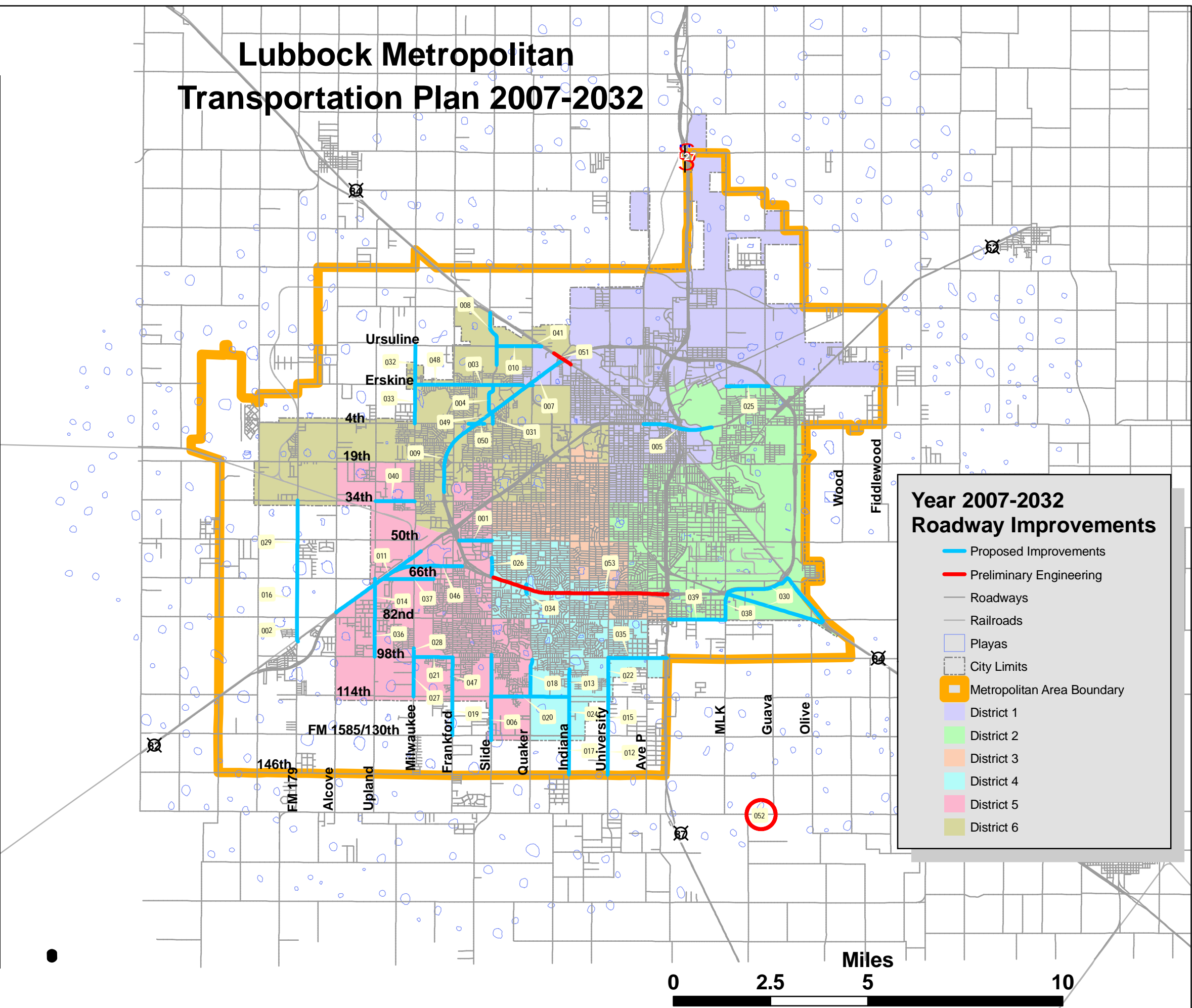
\*RTS fleet replaced 6 buses/year beginning FY08 and FY20; 2004 Gillig fleet replaced in FY18 and FY30; 2006 Gillig fleet replaced by FY20 and FY32

\*\* Van fleet replaced at a rate of 5 vehicles per year

## **Metropolitan Transportation Plan 2032 Projects Map**

ID	2007-2032 Roadway Projects
001	50th St from Loop 289 to Slide Rd
002	FM 179 from D Preston Dr to Loop 193
003	Erskine St from Frankford Ave to Salem Ave
004	Slide Rd from Erskine St to W Loop 289
005	US 82 from US 84 (Ave Q) to .8 mi East of IH-27
006	FM 1730 (Slide Rd) from 200' N of 98 <sup>th</sup> St to 1000' S of FM 1585
007	W Loop 289 from .2 mi NE of FM 2528 to US 84 (Clovis Hwy)
008	Slide Rd from Marshall St to US 84
009	W Loop 289 from .2 mi S of 4 <sup>th</sup> to .2 mi N of 34 <sup>th</sup> St
010	Ursuline St from Slide Rd to Quaker Ave
011	US 62/82 from Loop 193/82nd to Milwaukee Ave
012	University Ave from FM 1585 to 146 <sup>th</sup> St
013	Indiana Ave from 103 <sup>rd</sup> St to 114 <sup>th</sup> St
014	Upland Ave from 66 <sup>th</sup> St to 82 <sup>nd</sup> St
015	University Ave from 114 <sup>th</sup> St to FM 1585
016	FM 179 from 66 <sup>th</sup> St to D Preston Dr
017	Indiana Ave from FM 1585 to 146 <sup>th</sup> St
018	Quaker Ave from 98 <sup>th</sup> to 114 <sup>th</sup> St
019	Frankford Ave from 114 <sup>th</sup> St to FM 1585
020	114 <sup>th</sup> St from Slide Rd to Indiana Ave
021	98 <sup>th</sup> St from Milwaukee Ave to Frankford Ave
022	University Ave from 98 <sup>th</sup> to 114 <sup>th</sup> St
024	Indiana Ave from 114 <sup>th</sup> St to FM 1585
025	Erskine St from MLK Ave to Loop 289
026	Slide Rd from 57 <sup>th</sup> St to Loop 289
027	Milwaukee Ave from 98 <sup>th</sup> to 114 <sup>th</sup> St
028	Milwaukee Ave from 94 <sup>th</sup> to 98 <sup>th</sup> St
029	FM 179 from 34 <sup>th</sup> to 66 <sup>th</sup> St
030	US 84 from Loop 289/Spur 331/US 84 to US 84/FM 3020
031	Slide Rd from W Loop 289 to 4 <sup>th</sup> St
032	Milwaukee Ave from Erskine to Ursuline
033	Milwaukee Ave from Erskine to 4 <sup>th</sup> St
034	Quaker Ave from approach 500' N to approach 500' S of Loop 289
035	98 <sup>th</sup> St from University Ave to US 87
036	Upland Ave from 82 <sup>nd</sup> to 98 <sup>th</sup> St
037	66 <sup>th</sup> St from US 62/82 to Iola Ave
038	MLK Ave from US 84 to 82 <sup>nd</sup> St
039	82 <sup>nd</sup> St from US 87 to MLK Ave
040	34 <sup>th</sup> St from Milwaukee Ave to Upland Ave
041	Ursuline St from US 84 to Quaker Ave
046	Spur 327 from US 62/82 overpass to Loop 289
047	Frankford Ave from 98 <sup>th</sup> St to 114 <sup>th</sup> St
048	Erskine St from Milwaukee Ave to Frankford Ave
049	Loop 289 from SW of 4 <sup>th</sup> St to SW of Erskine St
050	4 <sup>th</sup> St from W of Loop 289 to E of Loop 289
Preliminary Engineering	
051	US 84 and W Loop 289 intx
052	Outer Loop from undetermined to undetermined
053	S Loop 289 from Slide Rd to IH27

# Lubbock Metropolitan Transportation Plan 2007-2032



### **Transportation Policy Committee**

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**Cover photo: City of Lubbock's Huneke Park by Timothy LaPierre** with Freedom Fountain in the foreground and the Lubbock Area Veterans War Memorial in the background.